CONCORDIA UNIVERSITY

1986-87

UNDERGRADUATE CALENDAR

Price: $2.00

Depending on geographical location, mailing costs will be requested.

1986

January

S	M	T	W	T	F	S
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August

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September

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October

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November

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December

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7	8	9	10	11	12	13
14	15	16	17	18	19	20
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28	29	30	31			

Loyola Campus
7141 Sherbrooke Street West
Montreal, Quebec
H4B 1R6

Sir George Williams Campus
1455 de Maisonneuve West
Montreal, Quebec
H3G 1M8

Concordia University

1986-87 Undergraduate Calendar

"Concordia". The name reflects Concordia's place in the community, being drawn from the motto of the City of Montreal, "Concordia Salus".

This is the only official listing of undergraduate courses offered at Concordia University.

Not all courses listed in this Calendar are offered this year. Students are advised to consult the Registration Handbook, issued at Registration, for a timetable of courses offered.

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Concordia

Concordia University is located in downtown and west-end Montreal. The name of the University reflects its place within the community; it is drawn from the motto of the City of Montreal, "Concordia Salus".

The University has strong traditions in part-time education, and many of its students work full-time during the day.

Founded in 1974 with the merger of Loyola College and Sir George Williams University, the University now offers undergraduate programmes in four Faculties: Arts and Science, Commerce and Administration, Engineering and Computer Science, and Fine Arts. At the bachelor's level, the University offers the degrees of Bachelor of Administration, Bachelor of Arts, Bachelor of Computer Science, Bachelor of Education, Bachelor of Engineering, Bachelor of Fine Arts, Bachelor of Commerce and Bachelor of Science. Undergraduate level certificates are also awarded in a growing number of areas.

At the master's level, the University awards the degrees of Master of Arts, Master of Science, Master of Computer Science, Master of Engineering, Master of Fine Arts, Master in the Teaching of Mathematics, and Master of Business Administration.

Programmes leading to the degree of Doctor of Philosophy are offered in Administration, Art Education, Chemistry, Economics, Educational Technology, Engineering, History, Humanities, Physics, Psychology, and Religion.

The University also offers graduate diploma programmes in Accountancy, Advanced Music Performance Studies, Art Education, Art Therapy, Communication Studies, Community Politics and the Law, Early Childhood Education, English, History, Institutional Administration, Instructional Technology, Library Studies, Sports Administration, The Teaching of Mathematics, Theological, Religious, and Ethical Studies, and Writing/Translation.

Enrolment in the 1985-86 academic year was:

Full-time undergraduate	11,599	Full-time graduate	1,655
Part-time undergraduate	8,614	Part-time graduate	1,312
Other (credit non-degree)	2,956		

In addition to the programmes described in this calendar and in the Graduate Studies Calendar, the University offers a wide range of summer courses and programmes on both campuses. A separate publication listing summer offerings is published annually.

Libraries

The Concordia Library System comprises four libraries, containing a collection of over one million items. The Science and Engineering Library on the Sir George Williams Campus, and the Drummond Science Library on the Loyola Campus, house the University's collection of materials on the sciences and technology. The remainder of the collection, including materials in the humanities, social sciences, fine arts, and commerce, is housed in Sir George Williams' Norris Library and Loyola's Vanier Library. All students may use facilities on either campus.

The Library collection, which is growing at an average rate of 65,000 items per year, includes books, periodicals, government publications, technical reports, microforms, non-print (audio-visual) material, and special collections. Materials which are not found at Concordia may be borrowed through the Interlibrary Loan system, or used in another library in Montreal (upon presentation of a letter from a Concordia librarian). Through Interlibrary Loans, Concordia students also have access to the multi-million volume collection in the Center for Research Libraries. Upon request the Center will send materials from its collection to Concordia. Reference librarians will assist students in locating materials they need, whether that material is at Concordia or elsewhere.

Students wishing more complete information on their libraries, are invited to pick up a copy of *The Library Owner's Manual* which is available free of charge in all libraries.

Laboratories and Computing Services

The University has 100 laboratories on both campuses with modern equipment for teaching and research in Biology, Chemistry, Communication Studies, Computer Science, Engineering, Geography, Languages, Physics, Psychology and Statistics.

The Computer Centre provides computing services to the University community. Students enrolled in any discipline are entitled to the use of the Centre's facilities, which include over 100 timesharing terminals. The Centre maintains an extensive software and application library and provides programming assistance and advice.

Art Collection and Galleries

The Concordia University collection of art is housed on both campuses. Portions of the collection are displayed in public areas of the Loyola Campus and in the galleries and display areas of the Sir

George Williams Campus. The collection comprises an extensive survey of modern Canadian paintings, drawings, graphic art, sculpture and minor art.

There are three main art galleries: The Weissman Gallery, Gallery One and Gallery Two, located on the mezzanine floor of the Henry F. Hall Building. There are also open-display areas on the same floor. There is a continuous programme of outside exhibitions and shows by students and faculty throughout the academic year. On occasion the galleries are also used for concerts, guest lectures and other cultural events.

A fourth gallery displaying the work of Fine Arts students is located at the Dorchester Blvd. entrance to the Visual Arts Building.

Theatre, Music and Arts Studios

The Faculty of Fine Arts operates the Douglass Burns Clarke Theatre located in the Hall Building. It is a modern facility seating 380 people, and is used primarily for dramatic productions and musical performances. The 650-seat F.C. Smith Auditorium, located on the Loyola Campus, is used for a wide variety of activities, including cinema, theatre, and music performances. On the same campus, the Chameleon Theatre, a flexible teaching facility, serves theatre students.

Most of the specialized studios and workshops for undergraduate and graduate students are located in the Visual Arts Building.

Music students use ensemble rooms in the Refectory Building on the Loyola Campus, where a number of practice studios of various sizes are maintained. Performances are held in the Chapel, in the large ensemble rooms and, occasionally, in the D.B. Clarke Theatre.

Audio-Visual Facilities

Facilities available through the Audio-Visual Department include television studios and editing suites, closed-circuit cable networks, sound stages, language and learning laboratories, cinemas, film libraries, self-teaching study centres, conference and public-address systems, and production facilities for materials in audio, videotape, film, photographic and graphic art formats.

Portable items of equipment may be borrowed from the Department's equipment depots.

The AVISTA centres on each campus offer training and production resources for faculty, students and staff in the operation of equipment and the preparation of softwares.

Film Presentations

The University shows films in cinema halls on both campuses. At Sir George Williams, the Montréal Conservatory of Cinematographic Art, established in 1968, houses an important collection of films of historical and cultural value. Each year, it organizes a series of film festivals, which often involve appearances by important figures from the film world.

Sports Facilities

The University offers extensive programmes for participation in intramural and intercollegiate sports. Facilities include several full-length playing fields and a fully-equipped physical education centre on the Loyola Campus. The centre contains a gymnasium and an ice arena, as well as training and rehabilitation areas, an activities room, a combatives room for individual contact sports, and a weight-training room.

Concordia University Capital Campaign

A New Understanding of *excellence*

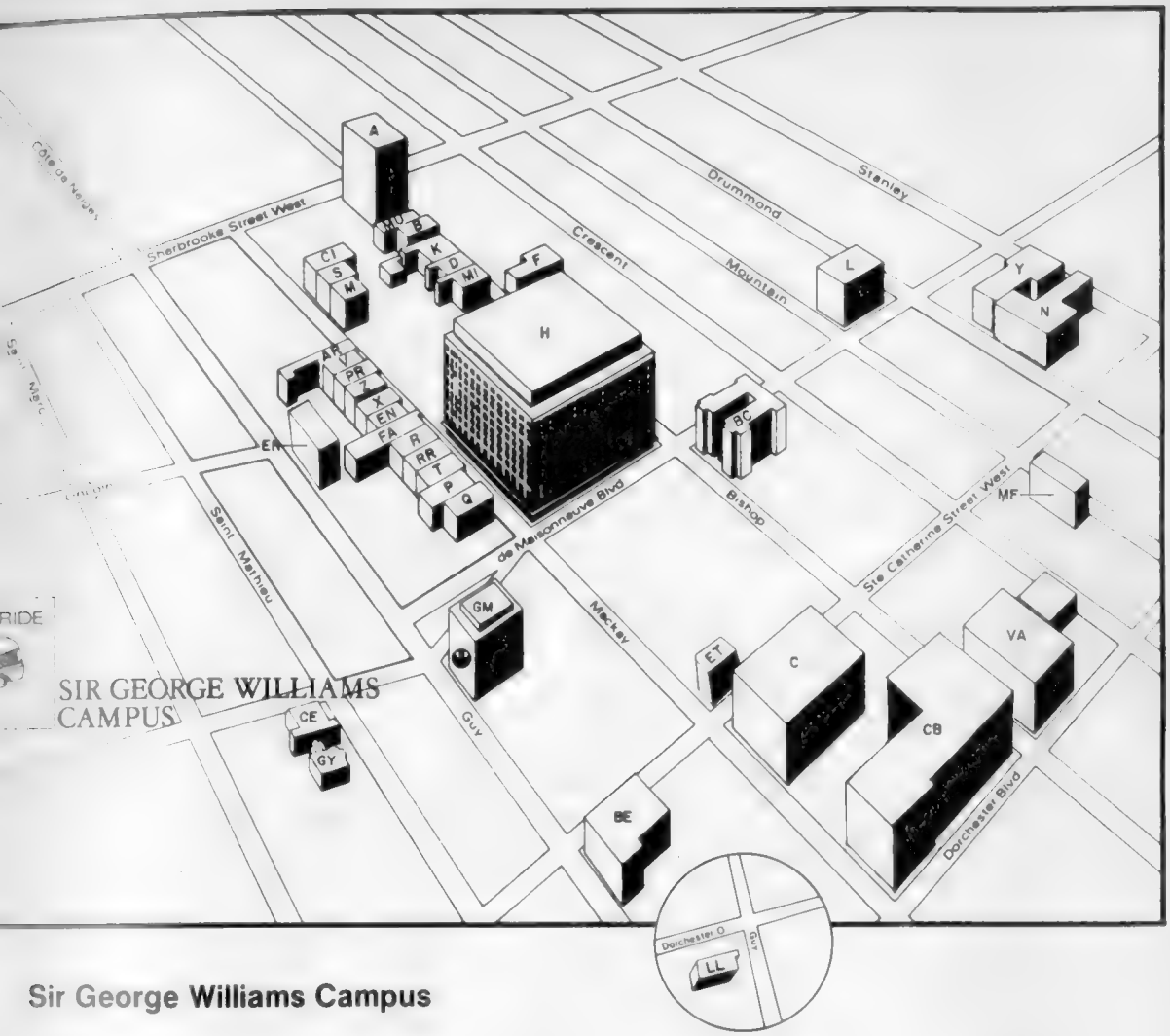
Financial Objective $25,000,000

How you can contribute to the Concordia Capital Campaign

Gifts may be pledged over a period of five years. Payments will be acknowledged, and receipts valid for income tax purposes will be sent to all donors. Cheques should be made payable to the Concordia University Capital Campaign and mailed to:

Concordia University
1455 de Maisonneuve Blvd. West
Montreal, Quebec H3G 1M8

Designated and memorial gifts are most welcome, and may be discussed with the volunteer canvasser or the Campaign office at the University
(514) 848-4864



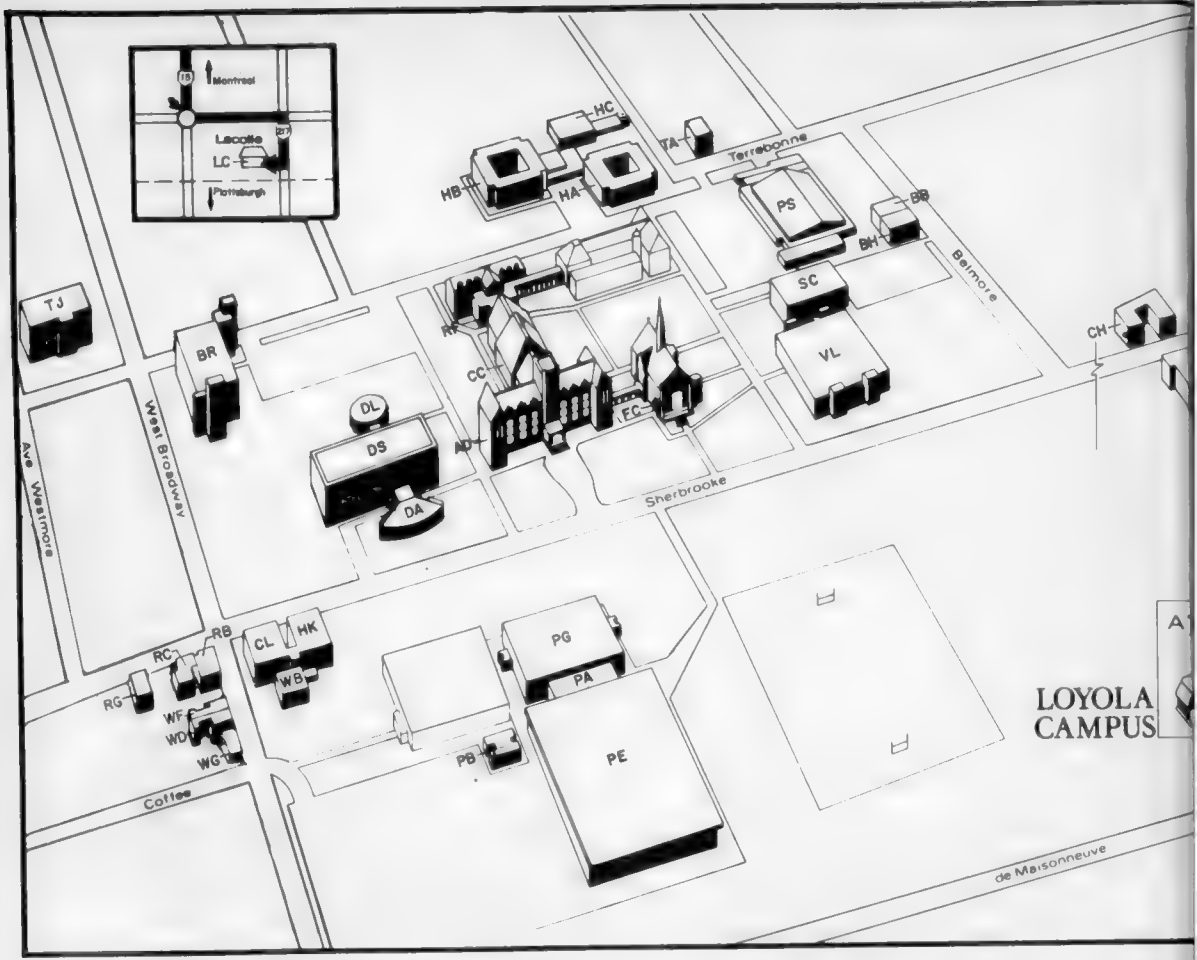
Sir George Williams Campus

BUILDING / ANNEX KEY

A	Annex A	1420 Sherbrooke W
AR	Annex AR	2130 MacKay
B	Annex B	2160 Bishop
BC	Bishop Court	1463 Bishop
BE	Centre for Building Studies	1249 Guy
C	Annex C	1440 St. Catherine W.
CB	Annex CB	1425 Dorchester Blvd. W.
CE	Continuing Education	1822 de Maisonneuve W.
CI	Annex CI	2149 Mackay
D	Annex D	2140 Bishop
EN	Annex EN	2070 Mackay
ER	Annex ER	2155 Guy
ET	Annex ET	1401 Mackay
F	Annex F	2085 Bishop
FA	Annex FA	2060 Mackay
GM	Annex GM	1550 de Maisonneuve W.
GY	Victoria School	1822 de Maisonneuve W.
H	Hall Building	1455 de Maisonneuve W.
K	Annex K	2150 Bishop
L	Annex L	2015 Mountain
LL	Annex LL	980 Guy
M	Annex M	2135 Mackay
MF	Annex MF	1230 Mountain
MI	Annex MI	2120 Bishop
MU	Annex MU	2170 Bishop
N	Norris Building	1435 Drummond
P	Annex P	2020 Mackay
PR	Annex PR	2100 Mackay
Q	Annex Q	2010 Mackay
R	Annex R	2050 Mackay
RR	Annex RR	2040 Mackay
S	Annex S	2145 Mackay
T	Annex T	2030 Mackay
V	Annex V	2110 Mackay
VA	Fine Arts Building	1395 Dorchester Blvd.W.
X	Annex X	2080 Mackay
Y	YMCA	1441 Drummond
Z	Annex Z	2090 Mackay

ALPHABETICAL KEY

Annex A	A	1420 Sherbrooke W.
Annex AR	AR	2130 Mackay
Annex B	B	2160 Bishop
Annex C	C	1440 St. Catherine W.
Annex CB	CB	1425 Dorchester Blvd. W.
Annex CI	CI	2149 Mackay
Annex D	D	2140 Bishop
Annex EN	EN	2070 Mackay
Annex ER	ER	2155 Guy
Annex ET	ET	1401 Mackay
Annex F	F	2085 Bishop
Annex FA	FA	2060 Mackay
Annex GM	GM	1550 de Maisonneuve W.
Annex K	K	2150 Bishop
Annex L	L	2015 Mountain
Annex LL	LL	980 Guy
Annex M	M	2135 Mackay
Annex MF	MF	1230 Mountain
Annex MI	MI	2120 Bishop
Annex MU	MU	2170 Bishop
Annex P	P	2020 Mackay
Annex PR	PR	2100 Mackay
Annex Q	Q	2010 Mackay
Annex R	R	2050 Mackay
Annex RR	RR	2040 Mackay
Annex S	S	2145 Mackay
Annex T	T	2030 Mackay
Annex V	V	2110 Mackay
Annex X	X	2080 Mackay
Annex Z	Z	2090 Mackay
Bishop Court	BC	1463 Bishop
Centre for Building Studies	BE	1249 Guy
Continuing Education	CE	1822 de Maisonneuve W.
Fine Arts Building	VA	1395 Dorchester Blvd. W.
Hall Building	H	1455 de Maisonneuve W.
Norris Building	N	1435 Drummond
Victoria School	GY	1822 de Maisonneuve W.
YMCA	Y	1441 Drummond



Loyola Campus

BUILDING/ANNEX KEY

AD	Administration Building	7141 Sherbrooke W.
BB	Belmore Building	3502 Belmore
BH	Belmore House	3500 Belmore
BR	Bryan Building	7141 Sherbrooke W.
CC	Central Building	7141 Sherbrooke W.
CH	Centennial Building	6931/37 Sherbrooke W.
CL	Cloran Building	7282 Sherbrooke W.
DA	Drummond Auditorium	7141 Sherbrooke W.
DL	Drummond Library	7141 Sherbrooke W.
DS	Drummond Science	7141 Sherbrooke W.
FC	F.C. Smith Auditorium	7141 Sherbrooke W.
HA	Hingston Hall A	7141 Sherbrooke W.
HB	Hingston Hall B	7141 Sherbrooke W.
HC	Hingston Hall C	7141 Sherbrooke W.
HK	Hackett Building	7270 Sherbrooke W.
LC	Lacolle Centre	Lacolle, Quebec
LH	Langley Hall	6900 Sherbrooke W.
PA	Physical Ed. — Admin.	7200 Sherbrooke W.
PB	Physical Ed. — Boiler	7200 Sherbrooke W.
PE	Physical Ed. — Rink	7200 Sherbrooke W.
PG	Physical Ed. — Gym.	7200 Sherbrooke W.
PS	Physical Services Bldg.	7141 Sherbrooke W.
RB	Sherbrooke 3	7300/7302 Sherbrooke W.
RC	Sherbrooke 2	7306/7308 Sherbrooke W.
RF	Refectory Building	7141 Sherbrooke W.
RG	Sherbrooke 1	7328 Sherbrooke W.
SC	Campus Centre	7141 Sherbrooke W.
TA	Annex TA	7049 Terrebonne
TJ	Annex TJ	7315 Terrebonne
VL	Vanier Library	7141 Sherbrooke W.
WB	West Broadway 1	2499/2501 West Broadway
WD	West Broadway 3	2490/2492 West Broadway
WF	West Broadway 2	2494/2496 West Broadway
WG	West Broadway 4	2480 West Broadway

ALPHABETICAL KEY

Annex TA	TA	7079 Terrebonne
Annex TJ	TJ	7315 Terrebonne
Administration Building	AD	7141 Sherbrooke W.
Belmore Building	BB	3502 Belmore
Belmore House	BH	3500 Belmore
Bryan Building	BR	7141 Sherbrooke W.
Campus Centre	SC	7141 Sherbrooke W.
Centennial Building	CH	6931/37 Sherbrooke W.
Central Building	CC	7141 Sherbrooke W.
Cloran Building	CL	7282 Sherbrooke W.
Drummond Auditorium	DA	7141 Sherbrooke W.
Drummond Library	DL	7141 Sherbrooke W.
Drummond Science Bldg.	DS	7141 Sherbrooke W.
F.C. Smith Auditorium	FC	7141 Sherbrooke W.
Hackett Building	HK	7270 Sherbrooke W.
Hingston Hall A	HA	7141 Sherbrooke W.
Hingston Hall B	HB	7141 Sherbrooke W.
Hingston Hall C	HC	7141 Sherbrooke W.
Lacolle Centre	LC	Lacolle, Quebec
Langley Hall	LH	6900 Sherbrooke W.
Physical Ed. — Admin.	PA	7200 Sherbrooke W.
Physical Ed. — Boiler	PP	7200 Sherbrooke W.
Physical Ed. — Gym.	PG	7200 Sherbrooke W.
Physical Ed. — Rink	PE	7200 Sherbrooke W.
Physical Services Bldg.	PS	7141 Sherbrooke W.
Refectory Building	RF	7141 Sherbrooke W.
Sherbrooke 1	RG	7328 Sherbrooke W.
Sherbrooke 2	RC	7306/7308 Sherbrooke W.
Sherbrooke 3	RB	7300/7302 Sherbrooke W.
Vanier Library	VL	7141 Sherbrooke W.
West Broadway 1	WB	2499/2501 West Broadway
West Broadway 2	WF	2494/2496 West Broadway
West Broadway 3	WD	2490/2492 West Broadway
West Broadway 4	WG	2480 West Broadway

CONCORDIA

11 Academic Calendar

11 Academic Calendar

The Academic Calendar is subject to change. Updated information will be available from the Registrar's Services Department. For dates pertaining to registration and course changes please consult the relevant class schedule or the Registrar's Services Department. Deadlines falling on weekends will be extended to the following Monday.

Regular Session — 1986-1987

1986

MARCH	Saturday, March 1	Last day for applications - Full-time Regular Session 1986-87.
	Friday, March 21	University Writing Test.
	Friday, March 28	Good Friday - University closed.
	Monday, March 31	Easter Monday - University closed.
APRIL	Tuesday, April 1	Last day for submission of late-completion work for courses ending in December 1985.
	Wednesday, April 16	Last day of classes - Regular Session 1985-86.
	Thursday, April 17	Examinations begin.
MAY	Thursday, May 1	See below for Summer Session 1986 tentative calendar.
	Tuesday, May 6	Examinations end.
	Friday, May 30	University Writing Test.
JUNE	To Be Announced	Convocations.
	Sunday, June 15	Last day for replacement and supplemental examination applications for courses taken during the Regular Session 1985-86.
	Sunday, June 15	Last day for applying for late completion of courses ending in April 1986.
JULY	Tuesday, July 15	Last day for applying for degrees, diplomas and certificates for Fall 1986.
AUGUST	Friday, August 1	Last day for submission of late-completion work for courses ending in April 1986.
	Monday, August 4	Replacement and supplemental examinations begin - Regular Session 1985-86.
	Tuesday, August 12	Replacement and supplemental examinations end - Regular Session 1985-86.
SEPTEMBER	Monday, September 1	Labour Day - University closed.
	Thursday, September 4	Classes begin - Day and Evening Regular Session.
	Sunday, September 21	Last day for replacement and supplemental examination applications for courses taken during the Summer Session 1986.
OCTOBER	Wednesday, October 1	Last day for application for late completion of courses taken during the Summer Session 1986.

	Saturday, October 11	Replacement and supplemental examinations for Summer Session 1986.
	Monday, October 13	Thanksgiving Day - University closed - no classes (see December 4, 1986).
	Friday, October 24	Last day for academic withdrawal from Fall-term courses.
	Friday, October 24	University Writing Test.
NOVEMBER	Saturday, November 1	Last day for submission of late-completion work for Summer Session courses 1986.
DECEMBER	Wednesday, December 3	Last day of classes - Fall Term.
	Thursday, December 4	Make-up day for classes scheduled on Oct. 13, 1986 - Instructors requested to contact Scheduling Office for room bookings.
	Friday, December 5	Examinations begin.
	Monday, December 22	Examinations end.

1987

JANUARY	Monday, January 5	Classes begin - Winter Term.
	Thursday, January 15	Last day for applying for degrees, diplomas and certificates for Spring 1987.
	Friday, January 30	University Writing Test.
FEBRUARY	Sunday, February 1	Last day for applications for Fall-term replacement and supplemental examinations - Graduating Students.
	Sunday, February 1	Last day for applying for late completions of courses ending in December 1986.
	Saturday, February 14	Fall-term replacement and supplemental examinations - Graduating Students.
	Monday, February 23	Mid-term break begins.
	Friday, February 27	Mid-term break ends.
MARCH	Sunday, March 1	Last day for applications Full-time Regular Session 1987-88.
	Monday, March 2	Last day for academic withdrawal from two-term courses and Winter-term courses.
	Friday, March 20	University Writing Test.
APRIL	Wednesday, April 1	Last day for the submission of late-completion work for courses ending December 1986.
	Saturday, April 11	Last day of classes - Regular Session 1986-87.
	Saturday, April 11	Examinations begin.
	Friday, April 17	Good Friday - University closed.
	Monday, April 20	Easter Monday- University closed.
MAY	Saturday, May 2	Examinations end.
JUNE	To Be Announced.	Convocations.

NOTE: For the information of instructors planning assignment deadlines, class tests, etc., and for persons scheduling meetings, the dates of the major Jewish Holy Days are set out below:

Rosh Hashanah	Saturday, October 4 and Sunday, October 5, 1986.
Yom Kippur	Monday, October 13, 1986.

	Sukkoth	Saturday, October 18 and Sunday, October 19, 1986. Thursday, October 23 and Friday, October 24, 1986.
	Passover	Thursday, April 24 and Friday, April 25, 1986. Wednesday, April 30 and Thursday, May 1, 1986. Tuesday, April 14 and Wednesday, April 15, 1987. Monday, April 20 and Tuesday, April 21, 1987.

Observance of the Holy Day commences on the preceding evening at Sunset.

Ten-Week Summer Session - 1986 (Day and Evening Classes)

MAY	Monday, May 12	Session begins.
JULY	Thursday, July 31	Session ends.

Six-Week Summer Session - 1986 (Day Classes Only)

JULY	Wednesday, July 2	Session begins.
AUGUST	Tuesday, August 12	Session ends.

Tentative Examination Timetable

DECEMBER 1986

	MORNING	*AFTERNOON*	*EVENING*
FRI. Dec. 5th	E	J	COMMON
SAT. Dec. 6th	COMMON	COMMON	
MON. Dec. 8th	SPECIAL	SPECIAL	M
TUE. Dec. 9th	B	L	N
WED. Dec. 10th	SPECIAL	SPECIAL	O
THU. Dec. 11th	I	SPECIAL	P
FRI. Dec. 12th	SPECIAL	K	Q
SAT. Dec. 13th	W & COMMON	X & COMMON	
MON. Dec. 15th	C	F	R
TUE. Dec. 16th	D	SPECIAL	S
WED. Dec. 17th	A	SPECIAL	T
THU. Dec. 18th	SPECIAL	G	U
FRI. Dec. 19th	H	SPECIAL	V
SAT. Dec. 20th	COMMON	COMMON	
MON. Dec. 22nd	SPECIAL	SPECIAL	Y & SPECIAL

APRIL 1987

	MORNING	*AFTERNOON*	*EVENING*
SAT. Apr. 11th	COMMON	COMMON	
MON. Apr. 13th	A	SPECIAL	*HOLIDAY*
TUE. Apr. 14th	HOLIDAY	HOLIDAY	*HOLIDAY*
WED. Apr. 15th	HOLIDAY	HOLIDAY	*O*
THU. Apr. 16th	SPECIAL	B	*P*
FRI. Apr. 17th	HOLIDAY	HOLIDAY	*HOLIDAY*
SAT. Apr. 18th	HOLIDAY	HOLIDAY	*HOLIDAY*
MON. Apr. 20th	HOLIDAY	HOLIDAY	*HOLIDAY*
TUE. Apr. 21st	HOLIDAY	HOLIDAY	*N*
WED. Apr. 22nd	K	SPECIAL	*T*
THU. Apr. 23rd	C	SPECIAL	*U*
FRI. Apr. 24th	SPECIAL	H	*Q*
SAT. Apr. 25th	W & COMMON	X & COMMON	
MON. Apr. 27th	D	SPECIAL	*M*
TUE. Apr. 28th	G	SPECIAL	*S*
WED. Apr. 29th	E	L	*R*
THU. Apr. 30th	J	F	*Y & COMMON*
FRI. May 1st	SPECIAL	I	*V*
SAT. May 2nd	COMMON	SPECIAL	

NOTE:

1. Each lecture block has been assigned an alphabetical code.
2. All examinations in one time block will normally be written at the time assigned. However, some courses with multi sections may be removed and placed in one of the common blocks while others may be removed for academic or administrative reasons and placed in a special time block.

CODING - DAY SECTIONS

MWF 08:45-10:00 A
MWF 10:15-11:30 B
MWF 11:45-13:00 C
MWF 13:15-14:30 D

MW 13:15-14:30 D
MW 14:45-16:00 E
MW 16:15-17:30 F

WF 08:45-10:00 A
WF 10:15-11:30 B
WF 11:45-13:00 C

TTH 08:45-10:00 G
TTH 10:15-11:30 H

TTH *11:45-13:00 I*
TTH *13:15-14:30 J*
TTH *14:45-16:00 K*
TTH *16:15-17:30 L*

*EVENINGS - SGW & LOY**

MON. 18:05-20:10 M
20:25-22:30 R
TUE. 18:05-20:10 N
20:25-22:30 S
WED. 18:05-20:10 O
20:25-22:30 T
THU. 18:05-20:10 P
20:25-22:30 U
FRI. 18:05-20:10 Q
20:25-22:30 V

EVENINGS - LOY ONLY

MON. 19:00-21:05 M
WED. 19:00-21:05 O

SAT. 09:00-11:05 W
SAT. 11:25-13:30 X

EVENINGS - SGW & LOY

MON. 16:05-18:00 M
TUE. 16:05-18:00 S
WED. 16:05-18:00 R
THU. 16:05-18:00 Y

**NOTE:*

1. Examinations for courses given 17:30-19:00 are held in the 18:05-20:10 time block.
2. Examinations for EVENING courses given 2 days per week are normally held in the first time block.

12 Administration

12 Administration

The following information was collected in the 1985-86 academic year.

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J. Alexander Sproule, MPsSc

13 Admission Regulations

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13 Admission Regulations

Director of Admissions
THOMAS E. SWIFT

Assistant Director of Admissions
L. PRENDERGAST

Admissions Officers
D. CHAMBERS
P. ROTH

Admissions Interviewers
C. BROWN
M. CONNORS
A. FARGNOLI
E. MALIK

Admissions Office
Loyola Campus
7141 Sherbrooke Street West
Montreal, Quebec
H4B 1R6
848-2668

The office is located at: AD-211

Graduate Students
Graduate Studies Office
1455 de Maisonneuve Blvd. West
Montreal, Quebec
H3G 1M8
848-3800

The office is located at:
Room S205
2145 MacKay Street
Montreal

Admissions Office
Sir George Williams Campus
1455 de Maisonneuve Blvd. West
Montreal, Quebec
H3G 1M8
848-2668

The office is located at: Room 105
1435 Drummond Street
Montreal

Liaison Office
Concordia University
Director
P. REGIMBALD

Liaison Officers
D. DOBROFSKY
D. McPEAK
M. NOTARANGELO

13.1 Admission to Concordia University

In keeping with the general principles accepted by the Quebec universities, the policy of Concordia University is that admission is open to any qualified applicants in the programme of their choice, within the limits of its resources.

In the case of programmes where demand is heavy, available resources may make it necessary to limit the number of persons admitted. This means that there will, regrettably, be cases where qualified applicants must be refused. In such cases the University will accept those applicants who have the best qualifications and demonstrated potential. Concordia has a long tradition of service to adult and part-time clientèles and this service remains a vital part of its mission.

The University undertakes to give fair consideration to all applications and to inform the applicant of its decisions and the basis for them within a reasonable period of time.

Full information on admission requirements and procedures will be found in this calendar, and in various other publications such as the Admissions Guide.

The University maintains admissions offices on both of its campuses. The offices will provide application forms, as well as information about requirements and procedures. There is, however, only one centre for the processing of applications. All applications and supporting documents should be mailed to:

Concordia University
Admissions Application Centre
P.O. Box 2900
Montreal, Quebec, H3G 2S2

Qualified applicants not admitted to their preferred programme because of enrolment limits will be considered for their second choice immediately.

Applicants wishing to change Faculty or campus should call or write the admissions office; they are not required to complete a second form.

13.2 Definitions

1. The University Year
The University year is made up of a *Regular Session* and a *Summer Session*. The Regular Session is made up of a *Fall Term* (September-December) and a *Winter Term* (January-April). The Summer Session is made up of a *Ten-week term* (May-July) and a *Six-week term* (July-mid-August).

2. Undergraduates
Students registered in a bachelor's degree or in a certificate programme, whether on a full-time or part-time basis. *Full-time* students are those registered for 24 credits or more in the Regular Session (or 12 credits or more in either the Fall or Winter term); *part-time* students are those registered for fewer than 24 credits in the Regular Session (or fewer than 12 credits in either the Fall or Winter term).

3. Certificate Students
Students registered in a certificate programme, whether on a full-time or part-time basis.

4. Mature Students
Undergraduates who have not met the regular academic admission requirements, but have been admitted on the basis of age, experience and potential (see §14). Mature students may study on a full-time or part-time basis.

5. Extended Credit Programme Students
Students registered in an extended programme, normally requiring a minimum of 120 credits, designed for students entering from secondary institutions outside Quebec. (See relevant Faculty section.)

6. Visiting Students
Undergraduate students from other universities who have written approval from their home university to take courses at Concordia University, or students currently registered in certain certificate programmes sponsored by external associations (e.g. programmes in the Faculty of Commerce and Administration). (See §13.10)

7. Independent Students
Students not seeking a degree or certificate, but who have been admitted to individual courses on a part-time basis (see §13.11).

8. Residence Requirement
The minimum number of credits which must be taken at Concordia University to obtain a degree or certificate awarded by the University (see §16.1.5).

13.3 Faculties and Degrees

FACULTY OF ARTS AND SCIENCE - §31
Bachelor of Arts (BA)
Bachelor of Education (BEd)
Bachelor of Science (BSc)

FACULTY OF COMMERCE AND ADMINISTRATION - §61
Bachelor of Administration (BAdmin)
Bachelor of Commerce (BComm)

FACULTY OF ENGINEERING - §71
Bachelor of Computer Science (BCompSc)
Bachelor of Engineering (BEng)

FACULTY OF FINE ARTS - §81
Bachelor of Fine Arts (BFA)

Bachelor's degrees, other than the Bachelor of Engineering, normally require successful completion of 90 credits, or 108 credits in the case of mature students (see §14), or 120 credits in the case of students admitted to the Extended Credit Programme (See §13.2 for definition and appropriate Faculty section for details on requirements.) (See §16.1.2 for the definition of credit.) For students registered full time, 30 credits constitute the normal workload in the Regular (Fall/Winter) Session. The degree of Bachelor of Engineering, however, requires from 113 to 117 credits of students having a Diploma of Collegial Studies (DEC) (or the equivalent), with the appropriate prerequisites ("profil"); the number of credits varies according to the option chosen and the previous preparation of the student.

13.4 Admission Requirements

13.4.1 APPLICANTS FROM QUEBEC INSTITUTIONS

Successful completion of a two-year pre-university programme in a CEGEP, with the award of a Diploma of Collegial Studies (DEC) (or the equivalent), including the specific courses required by the various programmes ("profil"). These "profils" are listed in the Department of Education booklet

"Accueil 86 - Structures d'accueil aux études universitaires de premier cycle pour septembre 86." For the convenience of applicants, requirements are listed in the various Faculty sections of this calendar. Applicants who have completed a professional programme in a CEGEP are also admissible to the University.

Students admitted to a particular programme at the University and who subsequently wish to change to another programme may have to complete specific prerequisites in addition to their regular programme requirements.

13.4.2 APPLICANTS FROM OTHER CANADIAN PROVINCES

Ontario Grade 13 graduates with a minimum overall average of 65% on 6 credits in appropriate subjects may be considered for admission to a 90-credit programme, but applicants for admission to the Bachelor of Engineering degree, or the Bachelor of Computer Science degree (Digital Systems, General Science or Mathematics options) will in general require four years of full-time study to obtain their degree. Applicants from other Canadian provinces who have completed Grade 12 in a programme oriented to university studies, or the Junior Division at Memorial University, Newfoundland, will be considered for admission to the Extended Credit Programme, normally requiring 30 additional credits; an overall average of at least 65% is required.

Content of additional credits will be found in the appropriate Faculty section of this calendar.

While no set pattern of high school courses is required, the courses presented should be appropriate for the degree programme to which application has been made.

13.4.3 TRANSFERS FROM OTHER UNIVERSITIES

Transfer applications are considered individually, on their merits. Applicants transferring from other accredited universities will be considered for an appropriate level of placement within the undergraduate programme at this University. For example, one year of undergraduate study following Grade 12 will normally qualify an applicant for entrance to the first year of a 90-credit degree programme. One year of study completed in an Ontario university following Grade 13 will, in general, qualify an applicant for admission to the second year of a 90-credit programme. (For Engineering see §13.3). There are some special conditions attached to the granting of transfer credits.

The number of credits awarded depends on the character, quality and quantity of the work completed. An applicant who has attended another university and wishes to transfer to an undergraduate programme at Concordia should understand the following conditions:

1. A student will not be given credit for courses taken in another university during the same academic term in which he has registered for courses at Concordia University, unless special permission has been obtained in advance from this University. The Admissions Office should be contacted for information on the correct procedure.
2. A student currently registered at this University wishing to take a course at another university during a different academic term—for example, the Summer—must get prior approval. The Admissions Office should be contacted for information on the correct procedure.
3. A student may not apply transfer credits towards the residence requirements at the University (as set out in the following paragraph) unless special permission has been obtained from the appropriate Faculty Council.
4. Out of the total number of credits required for a bachelor's degree, a minimum of 45 credits must be taken at Concordia University for all bachelor's degrees except that of the Bachelor of Engineering, where the minimum is 60 credits. Unless otherwise authorized by the Faculty to which the student has been admitted, these will be the *last* 45 credits (or the *last* 60 in the case of the Bachelor of Engineering).
5. The proportion of degree credits which must be taken at Concordia University in honours, specializations, majors, minors or other elements of concentration will be determined by individual Faculties but should be not less than 50%.
6. The Admissions Office, in consultation with the four Faculties, is responsible for the processing of pro-tanto credits.

13.4.4 TRANSFERS FROM OTHER POST-SECONDARY INSTITUTIONS

Credits obtained in junior colleges, community colleges, or Colleges of Applied Arts and Technology outside Quebec will, in general, be given the same recognition towards undergraduate programmes as they would receive in their respective province.

13.4.5 EXEMPTIONS AND PRO-TANTO CREDITS

The award of "pro-tanto credits" means that a course previously taken in another institution, or, in some cases, in another type of Concordia programme, is being counted towards a Concordia degree programme, or programme of concentration within that degree programme. Pro-tanto credits are normally specific (e.g. pro-tanto credit for Concordia course 'x' is given for course 'y' taken at another university) but they may be general, where the work done elsewhere is a valid part of an individual student's programme but does not correspond exactly to Concordia divisions of course content.

"Exemption" covers any case where it is recognized that a student has in one way or another covered the work of a course required in a Concordia programme, with an appropriate level of performance. In such cases students will replace the course from which they have been exempted with another course. Faculty or departmental regulations will indicate the nature of the replacement course—for example, another course in the same field, a restricted elective (e.g., "six credits in history or political science") or an open elective.

13.4.6 APPLICANTS FROM OUTSIDE CANADA

Academic qualifications presented by Canadian students applying from institutions outside Canada should be comparable to those expected of students applying from within Canada.

International applicants from institutions outside Canada are referred to §13.12.

13.5 Application For Admission

It is recommended that application for admission be made as early as possible on forms provided by the Admissions Office. Academic certificates and other supporting documents not available at the time of application must be submitted as soon as they become available. (Applicants enrolled in a CEGEP should refer to §13.6.1.) Arrangements should be made with the institution concerned to send directly any university transcripts, or where applicable, CEGEP transcripts. Where it is required, applicants will provide a copy of their High School Leaving Certificate with a certified list of the final marks in each subject. (A clear photocopy is acceptable.) Applicants who submit a certificate in a language other than English or French should attach a notarized translation into either English or French. If the certificate does not detail the subjects taken and the grades achieved, a certified statement of these from an authorized official of the institution should also be appended.

Applicants are advised to apply early in order to allow sufficient time for evaluation and review of their applications by the Admissions Office.

13.5.1 APPLICATION FEE

An application must be accompanied by an application fee of $15 (Canadian), payable by certified cheque or money order. It is not refundable under any circumstances nor will it be applied towards tuition fees. This fee is not transferable to a session other than that to which the student has applied. Applications not accompanied by a certified cheque or money order of $15.00 will not be processed.

13.5.2 APPLICATION DEADLINE DATES

Full-Time

March 1 and November 1 are the application deadline dates normally set for the Fall and Winter terms respectively. Late applications are considered wherever appropriate. Further information can be obtained from the Admissions Office.

Part-Time

Applications should be submitted well before the start of term to allow sufficient time for evaluation and notification. Candidates for the Fall and Winter terms should apply before July 15 and November 1. Final dates for the receipt of applications can be obtained from the Admissions Office.

N.B.: Part-time applicants to the Faculty of Fine Arts should apply before March 1.
Full-time or part-time applicants for entry to the Summer session should contact the Admissions Office for information on deadlines.

13.5.3 ENTRY DATES

September is the normal point of entry to full-time and part-time studies. Entry in January or in the Summer Session is limited to certain programmes only. In some cases, entry in January may require the completion of courses in the subsequent Summer Session.

The normal entry date for International students is September.

13.5.4 JANUARY ADMISSION

New students are admitted in January where places are available. It should be noted that not all programmes are offered for the January session. Admission in January has been introduced primarily to accommodate December graduates of Quebec CEGEPs, but is not restricted to this group.

The normal course load in the Winter Term (January to April) is 15 credits. Up to a maximum of 12 credits may be taken in the Summer Session. In some cases, January entrants are required to take summer courses.

International students, other than those applying from CEGEP, are admitted in January in exceptional cases only.

13.5.5 ADMISSION DEPOSIT

Applicants who have been granted admission to full-time studies and to certain high-demand part-time programmes are required to submit a cheque or money order for $50 (Canadian) to confirm their intention to enter the University. This admission deposit is non-refundable, but will be applied towards tuition fees at the University.

Applicants who receive an early conditional acceptance, but who are subsequently refused admission because they have not completed the minimum academic requirements for entrance, will have their admission deposit refunded.

13.6 Required Documents

13.6.1 CEGEP APPLICANTS

All applicants should submit, at the time of application, or as soon thereafter as possible, a student copy of their CEGEP transcript. This transcript should show their record to date, including grades for all courses followed during the previous terms. In addition, there should be an accompanying list of courses in progress. Applicants are responsible for ensuring that the student copy is both accurate and complete.

1. Applicants for Fall and Summer Terms

a) Mid-Year Transcripts

In the case of applicants currently enrolled in a CEGEP who are applying for the Fall or Summer Term, the University will obtain their most recent CEGEP record of study (the results of the previous terms, together with a list of courses being followed during the final term) from the Computer Centre of the Ministry of Education. The CEGEP records will be acquired on one of several scheduled dates between March and early April. Applicants should therefore complete the application forms as early as possible in order to avoid delay in the transfer of the CEGEP record. The "code permanent", which is the educational code number for Québec students, must be correctly entered on the application form as this identification number is used to obtain the CEGEP transcript. A copy of the computerized CEGEP record will be issued by the University to the applicant for verification.

b) Final Transcripts

Final transcripts are required by the Admissions Office as soon as they are available.

Former CEGEP students who are not attending CEGEP because they have graduated or have discontinued their CEGEP studies must arrange for their former CEGEP to send the transcript of their grades directly to the University.

2. Applicants for the Winter Term (January Admission)

Applicants for the Winter Term (January Admission) must arrange for their CEGEP to send the transcript of their grades directly to the University. The applicant is personally responsible for ensuring that the transcript is requested from and submitted by the CEGEP.

13.6.2 OTHER APPLICANTS

Two official copies of each transcript, in English or French, must be forwarded directly to the Admissions Application Centre by the institution which the applicant previously attended or at which the applicant is currently registered. In the latter case, the results of previous terms together with a list of courses in which the applicant is currently registered, must be submitted immediately. An official transcript which includes the results of the final semester must be forwarded as soon as possible.

Although an applicant's records from several institutions may be summarized on one transcript, an application will not be considered until two official transcripts from each institution attended have been received. These are required even though no credit may have been earned.

If for political reasons you are unable to obtain copies of your previous academic records, you must arrange to forward to the Admissions Office a notarized affidavit indicating level of schooling completed, certificates or diplomas awarded, and a list of courses taken.

13.6.3 OTHER DOCUMENTS

Canadian Citizens/Permanent Residents (Landed Immigrants) are required to provide documentary proof of their status in Canada. This must be done by submitting a photostatic copy to the Admissions Office of *one* of the following documents:

Canadian Birth Certificate
Canadian Baptismal Certificate
Citizenship or Permanent Resident
(Landed Immigrant) papers
Canadian Passport; Affidavit

The following documents are *not* considered acceptable:

Driver's Licence
Medicare card
Social Insurance Number card

13.6.4 ALL APPLICANTS

Applicants are required to declare and submit all pertinent academic records when applying for admission. Applicants who have failed to disclose an academic record at the time of application may have their acceptance or registration cancelled. Academic records undeclared at the point of application and subsequently submitted will not be used to upgrade a student's placement level.

13.7 Language Proficiency

All students entering bachelor's degree programmes must give proof of acceptable writing skills as a condition of graduation. The only exceptions are those already tested prior to admission (see

below). The graduation requirement may be met either by passing the University Writing Test or by obtaining a specific grade in a designated language course (see §16.2.11).

The language of instruction at Concordia is English, with a few specific exceptions, but assignments and examinations, again with a few exceptions, may be submitted in French. The graduation requirement may therefore be satisfied in either English or French.

Applicants whose first language is neither English nor French and who fall into the following categories must also pass the University Writing Test or obtain a specific grade in a designated language course:

1. Applicants holding a Québec *Diplôme d'études collégiales*, or the equivalent, from an English- or French-language system.
2. Applicants who have obtained an 'O'-level pass in English language in the General Certificate of Education, or the equivalent.
3. Applicants for Mature Entry or for admission to the Extended Credit Programme who have taken the last two years of full-time schooling in an English- or French-language system. The Admissions Office reserves the right to resolve any doubtful cases arising from the nature of such schooling.

Other applicants whose first language is neither English nor French must demonstrate their proficiency in English for admission purposes and must be tested in *English* writing skills prior to the point of entry by taking one of the following:

1. Concordia English Language Diagnostic Test

(available only to persons applying from within the Montreal area)

a) Persons applying from within the Montreal area who are required to write an English language test will automatically be scheduled to sit for the Concordia English Language Diagnostic Test upon making application to the University.

b) An application will not be considered complete until these test results have been received.

c) A testing fee of $15.00 is required of all who write the Concordia English Language Diagnostic Test. Further information concerning the payment of this fee will be provided when applicants are scheduled to write the test.

2. Test of English as a Foreign Language (TOEFL) *or* **The University of Michigan English Language Test**

(For applicants from outside the Montreal area)

These tests are administered in most countries of the world. It is the responsibility of the applicant to write directly to the appropriate address listed below for the necessary application forms and information.

Test of English as a Foreign Language
Educational Testing Service
Box 899
Princeton, New Jersey 08540
U.S.A.

English Language Institute
Testing and Certificate
The University of Michigan
2011B North University Bldg.
Ann Arbor, Michigan 48109
U.S.A.

REPORTING OF TOEFL OR UNIVERSITY OF MICHIGAN TEST RESULTS

a) To ensure that your TOEFL results are forwarded directly to Concordia University, you must indicate the 'Institution Code' at the time of writing the test: 0956.

b) The results must be reported directly to the Admissions Office by the TOEFL or University of Michigan Test Centre. Candidate copies of results or results that are more than two years old will not be acceptable as proof of language proficiency.

c) An application will not be considered before the test results have been received. Applicants should therefore contact the TOEFL or University of Michigan Test Centres as soon as possible in order that the date of receipt of test results does not delay or prevent consideration of their application.

Applicants attaining the prescribed level in one of the above tests will be considered to have met the graduation requirement. Those otherwise admissible but who have attained a lower but marginally acceptable level will be required to take specific courses in English as a Second Language (ESL). In the latter case, the required ESL courses will be indicated in the letter of acceptance, and successful completion of them will satisfy the graduation requirement.

13.8 Selection Process and Notification

Admission to undergraduate studies is based on a careful review of all credentials presented on behalf of a candidate. An application for admission is not given final consideration until all the required items have been submitted. However, the University does have an early conditional admission plan (see below). The University reserves the right to refuse admission to or registration in a particular programme even when the stated requirements for entrance have been satisfied.

13.8.1 EARLY CONDITIONAL ADMISSION

Applicants seeking admission to undergraduate programmes may be granted conditional acceptance on the basis of former records of study. Such records should include mid-year results for the current year. Final admission is contingent upon successful completion of the final term or

semester of study and satisfaction of the prescribed academic admission requirements. Candidates granted early conditional admission are in general notified before May 15.

13.8.2 LIMITED ENROLMENT

In some programmes the number of qualified applicants may exceed the number of places available. Possession of the stated requirements does not in itself guarantee admission to a particular programme.

13.9 Mature Entry

Information on Mature Entry will be found in §14.

13.10 Admission as a Visiting Student

Persons in the categories listed below may apply for Visiting Student status by contacting the Registrar's Services Department. In no case can students so admitted be guaranteed a place in a given course.

1. Students currently registered in certain certificate programmes sponsored by external associations (e.g. programmes in the Faculty of Commerce and Administration). Documentation: proof of membership in the association and citizenship documents. (See §13.6.3)
2. Undergraduate students from other universities who have written approval from their home university to take courses at Concordia University. Documentation: a letter from the Registrar of the home university and citizenship documents. (See §13.6.3)

13.11 Admission as an Independent Student

Persons wishing to take individual courses without committing themselves to a degree or certificate programme may register, if qualified, as Independent students, provided that they are Canadian Citizens, Permanent Residents (Landed Immigrants) or holders of a diplomatic visa. They should apply for Independent student status by contacting the Admissions Office. They should bring with them evidence of having met university entrance requirements and citizenship documents. (See §13.6.3.) This evidence will be evaluated by the Admissions Office. There are two categories of Independent student:

1. those meeting regular admission requirements.
2. those meeting Mature Entry age requirements (see §14), and who can satisfy the University that they have, through other experiences, acquired the necessary background for the course(s) for which they wish to register.

Independent students wishing to subsequently enter a degree or certificate programme must apply to the Admissions Office. Credits acquired by Independent students may subsequently be applied towards a degree or certificate if appropriate. In the case of the Faculty of Arts and Science, an Independent student may apply a maximum of 30 credits towards a degree.

Independent students may not register on a full-time basis. Please refer to §16 for those regulations which apply to Independent students.

13.12 Information of Special Interest to International Students

13.12.1 APPLICATION FEE

International applicants must include a $15 (Canadian) application fee.

13.12.2 STUDENT AUTHORIZATION

The Canadian Immigration regulations require that an International student obtain a Student Authorization (previously: Student Visa) before arriving at the Canadian port of entry. Such an authorization will not be issued at the port of entry or to foreign visitors who are already in the country. The authorization will be specific with regard to both institution and programme.

In addition, all students in possession of a letter of admission issued by any Québec educational institution are required to present to the Canadian Immigration authorities an additional document issued by the Québec Department of Immigration (Ministère de l'immigration du Québec) and entitled "Certificat d'acceptation". A Québec-bound student will not be issued a Student Authorization unless he or she is in possession of the Certificate or other document indicating approval from the Québec Department of Immigration. The student copy of the Certificate should be retained by the student.

Application forms and instructions for obtaining the "Certificat d'acceptation" are issued with the letter of admission.

13.12.3 UNITED KINGDOM AND COMMONWEALTH

In order to be considered for admission into a 90-credit undergraduate programme, applicants must present five General Certificate of Education papers including at least two at the Advanced Level. The following indicates by degree, which Advanced Level papers are required.

BAdmin, BComm, BSc — Mathematics and one other acceptable Advanced Level paper

BA, BEd, BFA — Any two acceptable Advanced Level papers

BEng — Mathematics and Physics

BCompSc

Systems Architecture — Mathematics and Physics

Information Systems — Mathematics and any other acceptable Advanced Level paper

General Science — Mathematics and Physics

Theoretical Computer Science — Mathematics and Physics

Ordinary and Higher National Certificates and Diplomas, with passes at an appropriate level, will be accepted in lieu of Advanced Level papers.

Applicants from Hong Kong who have received the Hong Kong Certificate of Education (English) with good grades in five subjects, and have completed one year of Form VI or hold the Hong Kong Certificate of Education (Chinese) with good grades in five subjects, and have passed the Chinese University of Hong Kong Matriculation Examination, may apply for admission to the Extended Credit Programme.

Applicants to an extended undergraduate programme in Engineering or Science are normally expected to have Mathematics and at least one Science subject; those applying to Commerce and Administration are advised to have Mathematics as part of their entrance qualifications.

Students with better than average results in five acceptable Ordinary Level papers plus one full year of formal academic schooling beyond Ordinary Level may be considered for admission to the Extended Credit Programme.

Content of additional credits will be found in the appropriate Faculty section of this calendar.

13.12.4 UNITED STATES

High School graduates with high standards from accredited schools who have followed an academic programme designed for university entrance may apply for admission to an extended undergraduate programme of approximately 120 credits. Content of additional credits will be found in the appropriate Faculty section of this calendar.

Applicants are required to have a better than average school record and a high ranking in their graduating class. While no set pattern of courses in high school is required, all applicants are expected to have taken four units of English. Those applying for admission to Science and Engineering must include three or four units in Mathematics and two in the Sciences. At least three units of Mathematics are recommended for admission to Commerce and Administration. The Admissions Office may approve slight deviations from the above pattern.

Students who have successfully passed Advanced Placement examinations in appropriate subjects with a grade of '3' or better may be granted some advanced standing.

13.12.5 TRANSFERS FROM POST-SECONDARY INSTITUTIONS

Transfers from post-secondary institutions are referred to §13.4.3.

13.12.6 OTHER COUNTRIES

Candidates applying from other countries who have achieved university admission level will be considered for admission provided that better than average grades have been attained. In most cases, a specific minimum overall standard on certificates is required. More specific information with respect to admission requirements and placement levels may be obtained by writing to the Admissions Office.

13.12.7 LANGUAGE PROFICIENCY

The language of instruction at Concordia University is English. For information regarding this requirement refer to §13.7

13.12.8 TUITION FEES FOR INTERNATIONAL STUDENTS

International students registering at Concordia University for the first time in September 1982 or later will be required to pay $195.00 (Canadian) per credit. The fees payable to the University for the regular session of two terms running from September to April are approximately $6,500 for a full-time student. This amount includes the tuition fees for 30 credits, student service fees, health insurance, and student association fees. The total amount will vary up or down proportionately, depending on the number of credits being taken. Further information regarding fees will be found in §15 of this calendar.

The following students are among those exempted from paying differential fees (at the time of going to press):

1. Diplomats, consular personnel, duly accredited representatives or civil servants of a foreign country, the United Nations or of one of its organizations, of an intergovernmental organization to which Canada belongs or any member of the staff of the above-listed persons who are working in Canada in an official capacity.
2. The spouse and unmarried children of the above-listed persons.
3. A student who is duly registered at a university and who has come to Quebec as either an exchange student or within the framework of a programme of cooperation agreed to by Quebec and which exempts the participants from paying differential fees.
4. A student who is duly registered at a university and who comes from a country which has signed an agreement with Quebec to this effect. Many Francophone countries currently have this special arrangement with Quebec.
5. A student who is duly registered at a university and whose status as a convention refugee has been recognized, though he may not yet have received the permission to settle here.

6. A student who is duly registered at a university in a programme of studies which is specifically exempted by the Ministry of Education.

At Concordia University, this refers to French language and French and Quebec literature programmes of study.

13.12.9 CRITERIA FOR ADMISSION

Admission to Concordia University is selective and will be considered when all relevant academic certificates have been received, as well as the Summary of Educational Experience form.

All certificates must show the actual grade obtained in each examination.

13.12.10 REGISTRATION

Registration for the September and January terms normally takes place in late August and mid-December respectively. International students must enrol on the dates indicated in their letter of acceptance. Late registration is not normally permitted. Complete information regarding registration is sent with the letter of acceptance.

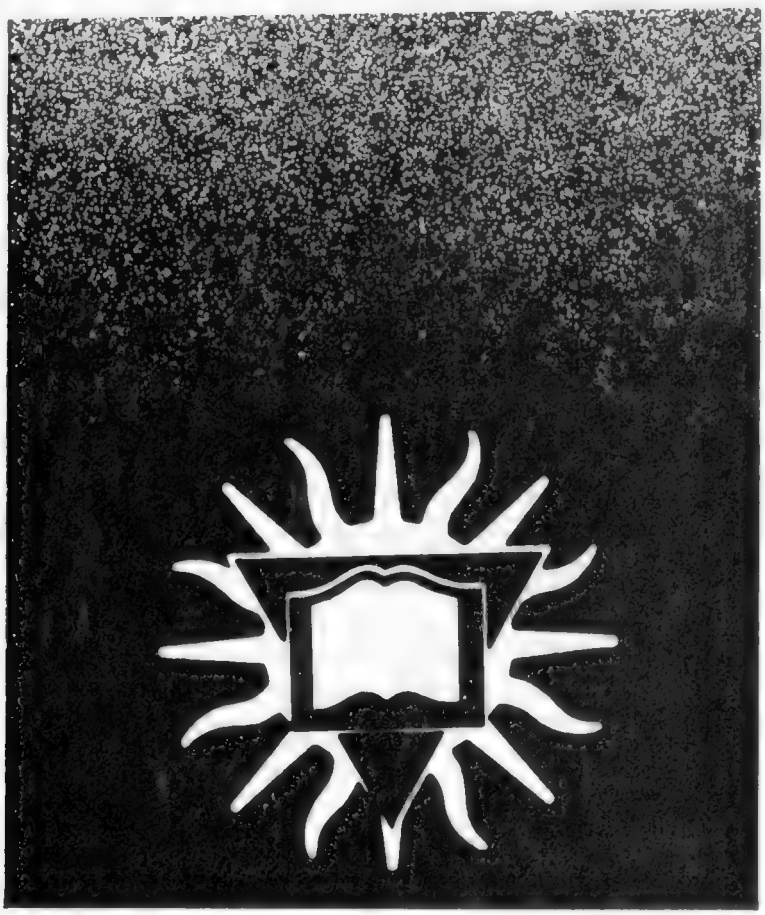
13.12.11 STUDENT HEALTH AND ACCIDENT INSURANCE

International students are not eligible to receive any medical benefits from the Quebec Medicare Programme. To offset possible medical expenditures, it is necessary to have some form of sickness and accident insurance, and for this reason, a compulsory plan for all entering International students has been adopted by the University.

13.12.12 FINANCES

Government financial assistance is not available to students attending college or university while on a Student Authorization (Visa). Such students are not allowed to be employed on a full-time or part-time basis, and they must present evidence of sufficient funds for tuition and maintenance before being admitted into Canada. The University does not have funds to finance International students.

CONCORDIA



14 Mature Entry

14.1 GENERAL INFORMATION

14.2 ADMISSION AS A MATURE STUDENT

14.3 PROGRAMME REQUIREMENTS
- 14.3.1 Arts
- 14.3.2 Science
- 14.3.3 Commerce and Administration
- 14.3.4 Engineering
- 14.3.5 Computer Science
- 14.3.6 Fine Arts

14.4 CHOICE OF ELECTIVES

14 Mature Entry

14.1 General Information

Concordia has for many years made it possible for men and women of 21 years of age or over, who have interrupted their studies, to undertake work towards university degrees and certificates, although they lack the normally required pre-university schooling.

Mature entrants are expected to demonstrate the potential to follow undergraduate courses, and are required to complete successfully a minimum of 18 additional credits over and above those required of students who enter with the regular qualifications. Mature entrants are, however, considered and treated in every way as undergraduates.

To advise and assist both prospective and enrolled students in dealing with academic requirements and other problems, the Faculty of Arts and Science maintains a Centre for Mature Students with offices and facilities on both campuses (see §31.515). Other Faculties have their own mechanisms for advising mature students.

14.2 Admission as a Mature Student

The admission of applicants for mature entry is subject to the following conditions:

1. The applicant must have reached the age of 21 by August 1, December 1 or April 1 of a given year, to enter the University in the following September, January or May respectively;

2. Although not meeting the normal academic requirements for admission *(Québec Diplôme d'études collégiales* or the equivalent), the applicant must satisfy the University that he or she has the potential to undertake undergraduate courses;

3. The applicant must have been out of school—that is not engaged in full-time study—for at least 24 months since attaining the age of 18. Applicants who have been out of school for only 12 months are also admissible provided that they have had no unfavourable academic record in the previous 24 months.

4. The applicant must be a Canadian Citizen or Permanent Resident (Landed Immigrant).

Applicants must submit a birth certificate or other acceptable proof of age, together with school records and any material which may indicate ability to pursue university studies. (§13 provides general information on how to apply for admission.)

14.3 Programme Requirements

Mature entrants must successfully complete at least 18 credits of additional work. In some cases these credits are made up of very specific courses - for example, basic courses in chemistry and physics for those contemplating studies in the pure and applied sciences or basic studio activities for those planning to take programmes in the Visual Arts; in others they are more general. These additional credits are designed with a view to making it possible for mature entrants to make the best use of the studies which they subsequently undertake.

Of these additional credits not more than six may be counted towards the student's eventual programme of concentration (honours, major, etc.).

Requirements are set by each individual Faculty, in terms of the programme to be undertaken.

14.3.1 ARTS

For entry to degree and certificate programmes in Arts (including Education (Teaching of English as a Second Language) and the General Certificate in Arts and Science):

18 credits chosen with the approval of the Centre for Mature Students prior to registration.

Certain departments in the Faculty have specific requirements, which will take up some or all of these credits. Students intending to follow programmes of concentration within these departments must include as many as possible of these specific requirements as part of their 18 additional credits:

Geography (Honours and Specialization in Physical Geography (B.A.))
6 credits in Mathematics

Mathematics (B.A.)
Mathematics C203[3], C204[3], C205[3]
(Note: Students not having Math C202[3] or the equivalent must include it in their 18 credits.)

Psychology (B.A.)
Psychology C200[6]
Biology C200[6] or C201[3]
3 approved credits in Mathematics (preparation for statistics)

14.3.2 SCIENCE

For entry to degree programmes in Science:

The minimum of 108 credits required for the B.Sc. degree (i.e. 90 plus the additional 18 credits), must include:

6 credits in Chemistry: C205[3], C206[3]
9 credits in Mathematics: C202[3], C203[3] and C205[3]*
8 credits in Physics: C204[3], C205[3], C224[1], and C225[1]
3-4 credits from: Physics C206[3] and C226[1]; or Biology C201[3]; or Geology C210[3]**

*Students not having Math C201[3], or the equivalent, must take it in place of one of their elective courses.

**Students intending to enter programmes of concentration in the departments of Biological Sciences, Exercise Science or Psychology should take Biology C201[3].

Students must consult with the Director of the Centre for Mature Students before registering, particularly with regard to the sequencing of the 26 or 27 credits in the B.Sc., and to the choice of the 18 additional credits required in the case of ■ certificate.

14.3.3 COMMERCE AND ADMINISTRATION

For entry to degree programmes in Commerce and Administration:

9 credits in Mathematics: C208[3], C209[3], C211[3]
9 elective credits, appropriate for the student's intended programme.

Requirements for certificate programmes are listed with the programme descriptions in the Faculty section of the Calendar (§61).

14.3.4 ENGINEERING

Mature entrants to the Bachelor of Engineering degree are required to complete a minimum of 138.75 to 141.75 credits, depending on the programme chosen, including:

Mathematics C202[3], C203[3], C204[3] and C205[3]

Requirements for mature entrants to the Certificate in Quality Control:

Mathematics: C202[3], C203[3], C204[3] and C205[3], and work experience.

N.B.: Students lacking basic mathematics may be required to take either or both of C200[3] and C201[3] in addition to the above.

Students entering the Bachelor of Engineering or Certificate in Quality Control programmes are presumed to have acquired some familiary with computers or programming, either through a course or through time spent working with a personal or other computer.

14.3.5 COMPUTER SCIENCE

Mature entrants to the Bachelor of Computer Science must complete a minimum of 108 credits, including the following:

a) Systems Architecture, General Science and Theoretical Computer Science Options:

Chemistry C205[3]
Physics C204[3], C205[3], C224[1] and C225[1]
Mathematics C202[3], C203[3], C204[3], C205[3]
INTE 298[3]*

b) General Business Option:

Mathematics C202[3], C203[3], C204[3], C205[3]
INTE 298[3]*

**NOTE: INTE 298A (see Academic Timetable) - Special Topic - Computer Literacy*

In all options, some students may require one or more of Mathematics C200[3], C201[3] and/or courses in English as a Second Language, as determined by language proficiency testing.

Depending on the option chosen, up to 9 of the credits listed above may be applied towards the elective component of the regular degree programme.

14.3.6 FINE ARTS

For mature entry to degree and certificate programmes in Fine Arts:

18 elective credits appropriate for entry into the student's ultimate area of concentration and chosen with the approval of the faculty adviser.

14.4 Choice of Electives

Electives will be chosen in consultation with faculty advisers - through the Centre for Mature Students in the case of Arts and Science. They will normally be at the introductory level, depending on the background of the individual student and the programme of concentration to be undertaken.

In the Faculty of Fine Arts courses will be selected from a list available from the Student Programmes Office in that Faculty.

15 Tuition and Fees

15.1 TUITION AND FEES

15.2 PAYMENT OF TUITION AND FEES

15.3 CANCELLATIONS—WITHDRAWALS—ADJUSTMENTS

15 Tuition and Fees

15.1 Tuition and Fees

The University reserves the right to change the published scale of fees without notice.

Tuition fees, for all undergraduate courses, are based on a per credit charge as listed below:

Canadian and other students with Permanent Resident (Landed Immigrant) status:	
Undergraduate	$ 15.00
Independent	$ 20.00
*Former International students	$145.00
*New International students	$195.00

**Certain International students may be eligible to pay the same fees as Canadian students. Detailed information may be obtained from the Accounts or Admissions Offices.*

In addition to the tuition fee, the following fees are charged on a per credit basis:

Student Service Fee	$3.00
Student Association	$1.80

Other Fees:

Application Fee	$ 15
Acknowledgement of Payment Receipt	$ 1
Course change fee - per form	$ 10
Copy of Registration certificate	$ 1
Duplicate of receipt	$ 2
*Early Registration Deposit	$ 100
Graduation Fee	$ 40
Late Registration Fee	$ 50
Late Completion Fee	$ 15
Special Examination Fee	$ 15
Supplemental Examination (plus invigilation fee when applicable)	$ 15
Transcript of academic record	$ 2
Copy of student record (no charge for first copy)	$ 1
Letter of attestation (no charge for first letter)	$ 5
Copies of Form T2202 (no charge for first set)	$ 2
Replacement of identification card	$ 5
Re-evaluation fee (refundable if re-evaluation is in student's favour)	$ 15
Copy of University Calendar (no charge for first copy)	$ 2

**In the event that Early registration is not completed as directed, this amount will be forfeited.*

A special fee of $1.00 per credit will appear on the student Registration Contract. "This fee is a special fee representing the undergraduate students' contribution to the Capital Campaign of Concordia University. It has been approved by the Concordia University Students' Association and the University Board of Governors as a special voluntary fee." (Board of Governors Meeting — 13 June 1985).

Interest is payable on the outstanding balances of students' accounts at the rate of 1% per month (12.7% per annum). This rate may change from time to time in conformity with prevailing interest rates.

15.2 Payment of Tuition and Fees

Payment of tuition and other fees may be made in accordance with the following options:

Summer Registration

1. Payment in full at registration.
2. Payment in two instalments:
   a) At registration - one half of tuition fees and all other fees.
   b) Three weeks after registration - balance plus interest from the contract date.

Fall/Winter Registration

Early Registration:

Students taking advantage of early registration reserve their courses for the up coming academic year well in advance of regular registration. This reservation requires financial commitments as follows:

1. an initial deposit *prior to registering for courses
2. the payment of the first instalment of the balance owing by a deadline in August

**In the event that the early registration is not completed as directed, the deposit will be forfeited.*

Regular Registration:

1. Payment in full at registration.
2. a) At registration—one half of tuition fees and all other fees.
   b) By January 15—balance plus interest calculated from contract date.

Winter Registration

1. Payment in full at registration.
2. a) At registration—one half of tuition fees and all other fees.
   b) By January 15—balance plus interest calculated from contract date.

Registration may be cancelled if a cheque is returned for any reason. In any event, a charge of $5.00 will be made for each returned cheque.

Failure to make payment, or to arrange satisfactory settlement of amounts owing to the University when they become due is sufficient cause to bar the student from classes or examinations, and to withhold diploma, scholastic certificate or transcript of record until the debt is adjusted with the University.

Registration is not considered complete until satisfactory arrangements have been made for the payment of fees.

All contracts are subject to revision for the adjustment of errors or omissions.

15.3 Cancellations—Withdrawals—Adjustments

Withdrawal from classes does not entitle a student to refunds of fees or cancellation of contract. Students who withdraw from courses or from the University must comply with the requirements set out in the Timetable of Classes published before each academic session in order to qualify for a rebate of tuition according to the following scale. Complete withdrawal from the University must be done in person or in writing.

OFF-CAMPUS COURSES: For additional information see Off-Campus Brochure.

Rebate of Tuition

Summer Session

1. Students who withdraw from the University before the end of the Summer course change period; full rebate of tuition less 6%.
2. All others, for courses of:

	1st Term Courses	Two Term Courses	2nd Term Courses
Prior to the end of the applicable course-change period	Full rebate less 6%	Full rebate less 6%	Full rebate less 6%
For two weeks after the end of the first term course-change period	NIL	50%	

Fall/Winter Session

NOTE: For dates of Fall and Winter course-change periods please see §11 (Academic Calendar).

1. Students who withdraw from the University before the end of the Fall (September) course-change period: full rebate of tuition less 6%.

2. All others, for courses of:

	1st Term	Two Terms	2nd Term
Prior to the end of the Fall course-change period	Full rebate	Full rebate	Full rebate
End of Fall course-change period to September 30	3/4	7/8	Full rebate

	1st Term	Two Term	2nd Term
October 1 to October 26	1/2	3/4	Full rebate
November 1 to November 30		5/8	Full rebate
December 1 to end of January course-change period		1/2	Full rebate
End of January course-change period to January 31		3/8	3/4
February 1 to March 1		1/4	1/2

The above rebates apply to the net reduction of courses within each course category. Different course categories are not combined for purposes of tuition rebate calculations.

Student Services fees and Student Association fees are subject to the same schedule of rebates as those for tuition. Other fees are not refundable.

16 Academic Regulations

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16 Academic Regulations

Assistant Vice-Rector
University Registrar
K.D. ADAMS

Associate Registrar
B. SMART

Assistant Registrar
R. MARTIN

Assistant Registrar
C. FOSTER

Co-ordinator of Graduation Evaluation
V. BOWKER

Co-ordinator of Academic Scheduling
L. CAMPBELL

Director of Examinations
G. FRAIN

Manager Registrar's Data Control
S. HILL

Transcripts and Records Officer
B. PEARSON

Director of Registration
M. TARLTON

Manager Registrar's Services
W. RASO

16.1 General Information

This calendar is the official University document on academic programmes and on the regulations pertaining to them. All members of the University community are expected to be familiar with the regulations which concern them. In particular, students are responsible for knowing the regulations and for complying with them. Specific written permission must be obtained from the appropriate authority for exemption from any academic regulation. Routine approval of a records form (for example, the registration contract or the course-change form) does not constitute approval of an exemption or exception.

All students at the undergraduate level, whether enrolled in degree or certificate programmes or registered as Visiting or Independent students, are subject to the academic regulations contained in this section. Definitions of terms will be found in §13.2.

16.1.1 ACADEMIC YEAR

The Academic Year is made up of a Regular Session (September to April) and a Summer Session (May to August). For record purposes, a given academic year includes the Summer Session and the following Regular Session.

Regular Session:

The Regular Session is divided into a Fall term (September-December) and a Winter term (January-April), each of fifteen weeks' duration, including an examination period. The Academic Calendar (§11) contains precise dates for the beginning and end of classes and the beginning and end of the examination period. Final examinations must be held within this examination period.

Summer Session:

The Summer Session covers all courses offered between the beginning of May and the middle of August. There is an evening session, with nine weeks of instruction and two weeks for examinations, running from early May to late July, and a concentrated six-week day session, including examinations, running from the beginning of July to mid-August.

16.1.2 DEFINITION OF CREDIT

In accordance with the recommendations of the Quebec Council of Universities, effective 1974-75, the credit base takes into account the total activity of the student, in terms of lectures, conferences, laboratories, studio or practice periods, examinations, and personal work. One credit represents, for the average student, a minimum of 45 hours spread across the various activities. Full-time students will normally take 30 credits in the Regular Session. Up to 12 credits may be taken in the Summer Session.

16.1.3 STATUS

Full-Time and Part-Time:

Full-time undergraduates are those for whom university studies are their principal activity, while part-time undergraduates are those for whom university studies are not their principal activity. Eligibility for government loans and bursaries requires full-time status at all times during the academic year*. Identification of full-time and part-time status depends on the number of credits for

which a student is registered at the close of the course-change period according to the following table:

	Full-Time*	Part-Time
Registration for both Fall and Winter terms	24 Credits or More	Less than 24 Credits
Registration for Fall Term Only	12 Credits or More	Less than 12 Credits
Registration for Winter Term Only	12 Credits or More	Less than 12 Credits
Registration for the Summer Session	12 Credits (maximum)	Less than 12 Credits

NOTE:
Financial Aid Students
* Please see §18.3.3 (Financial Aid) for special rules on status that have been established by the Government of Quebec for students receiving Quebec loans and/or bursaries.

16.1.4 COURSE LOAD

Notwithstanding the number of credits used to determine the status of a student for statistical purposes, as listed in §16.1.3, the maximum course load for full-time students, part-time students, visiting students, and independent students are as follows:

Regular Session—Full-Time Status

The course load varies according to the faculty in which the student is enrolled.

FACULTY OF ARTS AND SCIENCE, COMMERCE AND ADMINISTRATION, AND FINE ARTS:

A student may register for a maximum of 30 credits in any Regular Session.

FACULTY OF ENGINEERING AND COMPUTER SCIENCE:

See under Engineering Faculty §71 for Engineering programmes. For Computer Science programmes, the maximum is normally 30 credits in any Regular Session.

Regular Session Part-Time Students

Part-time students in all faculties, and Independent students, may register for a maximum of 18 credits, equally divided between the Fall and Winter Terms.

Summer Session

Students, other than those enrolled in the Centre for Co-Operative Education, may not take more than a total of 12 credits of work during the Summer Session because of the concentrated nature of the schedule. The Summer Session includes all courses scheduled from the month of May to the month of August inclusive.

16.1.5 RESIDENCE REQUIREMENTS

1. Out of the total number of credits required for a bachelor's degree, a minimum of 45 credits must be taken at Concordia University for all bachelor's degrees except that of the Bachelor of Engineering, where the minimum is 60 credits. Unless otherwise authorized by the Faculty to which the student has been admitted, these will be the *last* 45 credits (or the *last* 60 in the case of the Bachelor of Engineering).

The proportion of degree credits which must be taken at Concordia University in honours, specializations, majors, minors or other elements of concentration will be determined by individual faculties but should be not less than 50%.

2. Students who already possess a bachelor's degree may undertake a second bachelor's degree, under the conditions laid down below. Students are, however, advised that before registering for a second bachelor's degree they should consider whether their purpose might not be better served by taking a diploma or master's programme. To obtain a second bachelor's degree at Concordia University students must:

a) Register in an established programme with a higher degree of concentration than a Minor.

b) Complete sixty credits in courses other than those credited towards the first degree, at least thirty-six of which must be taken in the new field of specialization.

3. Any student seeking to transfer to Concordia University after having failed at another university, or after having compiled an unsatisfactory record at another university, must fulfill the residence requirements stipulated for him upon admission. In general, a minimum of sixty credits will be required for any degree.

16.1.6 REGISTRATION FOR COURSES

Selection of courses for a term or session is done during a specified period prior to the start of classes. Please consult the appropriate class schedule for details regarding dates, hours, locations and appointments. Class schedules are available at both Registrar's Services Departments.

16.1.7 WITHDRAWAL

Students who are withdrawing from a course or courses, or entirely from the University, must notify the Registrar's Office, either on the specific form designated for the purpose and available from the Registrar's Services Department, or by letter.

The responsibility for taking all steps necessary for withdrawal is entirely that of the student. Ceasing to attend classes, or informing an instructor of intent to withdraw does not constitute withdrawal.

For each session there is a final date beyond which a student may not withdraw from a course. An evaluation by the instructor of a student's progress is not mandatory prior to the withdrawal deadline. In addition, the fee penalty varies by the date on which a course is dropped. Students are referred to the Academic Calendar (Section 11) and to the statement of fees regarding refunds.

16.1.8 INTER UNIVERSITY AGREEMENTS

1. CROSS-REGISTRATION (Provincial)

Concordia University, McGill University, Université de Montréal and Université du Québec à Montréal have agreed to permit transfer of academic credit and course fees between Montreal universities up to a maximum of 6 credits in any one year. (Similar arrangements may be made with other Quebec universities.) In exceptional cases, a student may be authorized to take up to 12 credits at another university. Part-time students may be authorized to register for credits on the condition that the number of credits for which they register does not exceed 30% of the number of credits taken at the home university in any academic year. The agreement is intended to include only those courses not given at the home university which fit a student's programme requirements. Authorization for an undergraduate student to cross-register must be given by the student's academic adviser, the Assistant Dean for Student Affairs of the student's faculty, and the Registrar. The arrangement allows for payment to be made by Concordia to the "host" university if the student has paid tuition fees in full to Concordia University.

This agreement in no way interferes with the host university's right to accept or refuse, as it sees fit, registration of a student from another university in any of the courses or programmes that it offers. The student is expected to follow the registration procedures of the host university, and when attending the host university, is subject to its regulations.

Credits earned within this policy are counted towards the University residence requirements. Any failures will similarly be counted in the student's assessment under the applicable Failure Regulations, §16.3.7.

2. STUDENT EXCHANGE PROGRAMME (International)

The universities of Québec and certain American and European universities have agreed to set up student exchange programmes enabling a student registered on a full-time basis with a university (home university) to follow courses at another university (host university) so as to satisfy part of the credit requirements for the degree. In order to be eligible for the exchange programmes, a student must be registered full-time at Concordia, be a Canadian citizen, possess an above-average academic record, and have completed a minimum of thirty credits by 31 May of the year in which the student wishes to study abroad. Information on participating institutions and general conditions of the exchange programmes can be obtained from the Office of the Vice-Rector, Academic.

3. LANGUAGE AND CIVILIZATION PROGRAMME (International—Summer Term Only)

The University sponsors a number of language and civilization summer study sessions in various foreign countries. These consist generally of structured course work for credit, together with cultural activities. Further information can be obtained from the Department of Modern Languages and Linguistics, the Département d'Études françaises or the Centre for Continuing Education.

16.1.9 GRADUATION

Degree and certificate candidates who expect to complete requirements in a particular year must contact the Registrar's Office to make application for that degree or certificate. Graduation Application Forms provided by the Registrar's Services Department must be submitted before July 15th for Fall graduation and January 15th for Spring graduation.

16.1.10 HIGH ACADEMIC ACHIEVEMENT

A degree With Distinction or With Great Distinction will be awarded to students who obtain a grade point average (GPA) of 3.40 for 'With Distinction', or 4.00 for 'With Great Distinction'.

The grade point average for students in the Faculty of Arts & Science, the Faculty of Commerce & Administration, and the Faculty of Fine Arts will be calculated over the last ninety credits. For students in the Faculty of Engineering and Computer Science the grade point average will be calculated over the entire programme. Additional credits in extended programmes are not included in any calculation. In the case of transfer students, all courses taken at Concordia will be included. However, a transfer student must have taken a minimum of sixty credits at Concordia in order to be eligible for distinguished mention.

16.1.11 TRANSCRIPTS

A student may obtain an unofficial copy of his record from the Registrar's Services Department during normal operating hours. Official Transcripts, however, are not issued to students but are sent directly to another institution or potential employer at the student's written request, provided there is no outstanding account owing to the University.

16.1.12 STUDENT REQUEST COMMITTEE OF FACULTY COUNCILS

Each Faculty has a Student Request Committee made up as follows:

- 3 faculty members appointed by the Faculty Council (which may also appoint alternates).
- 1 representative from the Registrar's Office or the Admissions Office.

- 1 student appointed by the Faculty Council.
- the Associate/Assistant/Vice Dean who acts as convener.

Student Request Committees are authorized to handle applications from full-time or part-time students (except independent students) on matters relating to academic regulations. Requests on procedural matters will be redirected to the appropriate administrative office.

Each Student Request Committee will establish guidelines for the treatment of applications and delegate to the Associate/Assistant/Vice Dean the responsibility for handling applications within these guidelines.

Students and members of the Faculty may request that the Student Request Committee review any decision made by the Associate/Assistant/Vice Dean in his capacity as delegate of the Committee. During such reviews, the Associate/Assistant/Vice Dean will not sit as a member of the Committee. Decisions of the Committee are final.

Independent students must submit *all* requests relating to University Regulations to the Registrar.

16.1.13 CANCELLATION OF CLASSES

Normally class cancellations are posted on the classroom door prior to the commencement of class. In some instances instructors may be late. In such cases, classes will be considered officially cancelled, if an instructor is 15 minutes overdue for a 50-minute class, 20 minutes overdue for a 75-minute class, or 30 minutes overdue for a 115-minute class.

16.2 Programmes and Regulations

16.2.1 CURRICULUM OBLIGATIONS

The University recognizes the principle that students should be allowed, subject to the conditions stated below, to complete their degree programme (e.g., Bachelor of Arts, Bachelor of Commerce, etc.) as well as their programme of concentration (Honours, Specialization, Major), in accordance with the requirements in force at the time when they were first admitted to the programme and/or concentration.

1. With respect to the format and curriculum content of specific programmes the University reserves the right to modify the curriculum requirements in the light of (a) changing trends in academic and professional fields, and (b) availability of appropriate resources. Where a programme is substantially altered for such reason by action of the University Senate, the University recognizes its responsibility to offer suitable transition arrangements with respect to modified programmes. In these exceptional cases the modified programme requirements should become effective for all students no later than five years after the effective date of change for newly admitted students.
2. The University reserves the right to cancel any degree, diploma, or certificate programme. In the event of the cancellation of a programme, the University recognizes its responsibility to offer courses in the cancelled programme. However, these courses would be phased out in accordance with a schedule which will depend upon the number of students involved. Students in the programme would be informed of this schedule at the time of cancellation. Where a student in good standing has not been registered for over three years, the University, while not questioning such a student's right to remain in the University, reserves the right, where circumstances warrant, to refuse such a student permission to continue in the programme in which he or she was registered at the point where studies were interrupted.
3. Where a student acquires credit toward a degree, diploma or certificate in a discontinuous manner and over a protracted period of time subsequent to his admission, the University reserves the right, at any time, to require such a student to take further credits or fulfill additional requirements in order to obtain that degree, diploma or certificate.
4. With respect to changes in the academic regulation under Sections 16.1 and 16.3, including changes in performance requirements for continuation in, or graduation from, any degree programme (e.g., changes in the minimum level of grades or grade point average) the modifications become effective on a given date without regard to the date of admission to a programme. Notice of such changes will normally be given a minimum of one year in advance.
5. When a student fails an academic year, the University reserves the right at the time of readmission to require such a student to take further credits or to repeat certain courses. The student may also be required to meet any changes in the academic regulations that may have occurred since being admitted to the programme.

16.2.2 CURRICULUM REGULATIONS

1. The regulations relating to the degree requirements are located in the Faculty sections:

Faculty of Arts and Science: §31
Faculty of Commerce and Administration: §61
Faculty of Engineering and Computer Science: §71
Faculty of Fine Arts: §81

16.2.3 CONCENTRATION REQUIREMENT

Since the CEGEP programme is designed to give all students the opportunity to explore different fields and thus acquire a broad general basis for future study, the undergraduate programme requires some degree of concentration, according to the interests and capability of the student. There are several forms of concentration, ranging through Honours, which require success in a programme of

high concentration accompanied by a prescribed level of performance; the Specialization and the Major requiring varying degrees of concentration without a prescribed performance requirement; and the Double Minor, involving a lesser degree of concentration in two disciplines or fields, and without a prescribed performance requirement.

In order to graduate a student must have completed one of the following types of programme concentrations: Honours, Specialization, or Major. Any one of these may be combined with a Minor. In the Faculty of Fine Arts the degree of BFA may be awarded for a Double Minor.

Prior to registration, students will be required to select one of the types of programme of concentration outlined above. In the case of Honours, students will register upon entry in an Honours *programme*, but their acceptance as Honours *students* will depend on their performance during their first year. Students failing to meet requirements for Honours standing will proceed in either a Specialization or a Major programme.

16.2.4 HONOURS PROGRAMMES

These regulations represent a minimum academic standard for Honours programmes. All programmes and additional Faculty regulations, including those with higher standards, are listed in the Faculty sections under "Honours Programmes".

The University has approved programmes leading to an Honours degree in certain selected fields. The Honours programme consists of 60 or more credits in a discipline or field, with superior performance being required to enter and remain in the programme. In order to qualify for an Honours degree a student must comply with the regulations set forth below:

1. An Honours student must meet the general degree requirements as well as the specific requirements for an Honours degree.
2. An Honours student must maintain a GPA of 3.0 in all Honours courses; the minimum acceptable grade in any single Honours course is 'C'.
3. An Honours student must have a minimum GPA of 2.7 for Honours courses taken in each academic year. For part-time students this will be calculated in 18 credit blocks.
4. In the non-Honours courses of the degree programme, an Honours student must have a GPA of no less than 2.0.
5. Students who are required to withdraw from the Honours programme will proceed in the Major or Specialization programme. Reinstatement in the Honours programme is possible only by appeal to The Faculty Honours Committee.

These regulations apply to those students entering Honours Programmes on or after June 1, 1977. Students who started in an Honours programme prior to that date may continue under the old regulations published in the 1978/79 Undergraduate Calendar.

16.2.5 SPECIALIZATION PROGRAMMES

The Specialization, in keeping with the structures recommended by the Quebec Council of Universities, is an approved sequence of courses totaling 60 or more credits. In very exceptional cases there may be a performance requirement.

16.2.6 MAJOR PROGRAMMES

The Major, again in keeping with the structures recommended by the Quebec Council of Universities, is an approved sequence of courses totaling 36 or more credits, except in the Faculty of Commerce and Administration where the Major consists of at least 24 credits in the chosen discipline in addition to the required 51-credit core. The Major, like the Specialization, may include certain approved courses in other closely related fields.

16.2.7 MINOR PROGRAMMES

A programme, again in keeping with the structures recommended by the Quebec Council of Universities, is an approved sequence of courses totaling 24 or more credits, except in the Faculty of Commerce and Administration where the Minor consists of at least 12 credits in the chosen discipline in addition to the required 51-credit core.

16.2.8 DOUBLE MINOR PROGRAMMES

In the Faculty of Fine Arts Double Minor programmes are made up of two approved sequences of courses totaling 24 or more credits in two specific disciplines or fields.

16.2.9 COMBINATIONS

An Honours, Specialization, or a Major programme may be combined with a Minor programme.

16.2.10 CERTIFICATE PROGRAMMES

An Undergraduate Certificate programme is a coherent programme of 30 credits made up of regular undergraduate courses that are, in turn, normally applicable to the appropriate bachelor's degree.

16.2.11 WRITING SKILLS REQUIREMENT

With the aim of improving students' writing skills, a graduation requirement applies to all students entering bachelor's degree programmes in or after September 1983 (September 1984 in Fine Arts).

1. All students entering bachelor's degree programmes must take and pass the University Writing Test (see paragraph 2) or obtain a specific grade in a designated language course (see paragraph 3). This requirement is a condition of graduation. The only exceptions are those already tested prior to

admission (see paragraph 4). Certificate and Independent students are not required to be tested unless they decide at a future date to enter a degree programme.

2. The language of instruction at Concordia is English, with a few specific exceptions, but assignments and examinations, again with a few exceptions, may be submitted in French. In accordance with this policy, the University Writing Test may be taken in English or French. It takes the form of a short composition on one of a variety of topics. It may be taken at several points in the year, but students are encouraged to take it as soon as possible after entry. Students failing the test may take it again as often as is necessary. No fee is charged, and failures will not be entered on the student record.

3. The graduation requirement may also be met by passing one of a number of specified courses with a set level of performance. At present, it is required to obtain a grade of C- or better in English (ENGL) C212 or French (FRAN) C400. For those enrolled in the Bachelor of Engineering, or in a Journalism programme, a grade of C- or better in Engineering (ENGR) C281 or Journalism (JOUR) C201, respectively, also satisfies the requirement.

4. Students tested for admission purposes and who attained a prescribed level in the Concordia English Language Diagnostic Test (CELDT) or the Test of English as a Foreign Language (TOEFL) or the University of Michigan English Language Test (see §13.7), are considered to have met the graduation requirement. Those otherwise admissible but who attained a lower than marginally acceptable level in one of these tests will be required to take specific courses in English as a Second Language (ESL). In the latter case, the required ESL courses are indicated in the letter of acceptance. Successful completion of them will satisfy the graduation requirement. The University reserves the right to re-test students admitted on the basis of scores obtained in external tests.

16.3 Evaluation, Grading, Examinations and Advancement

16.3.1 EVALUATION

A university degree certifies that its holder has attained a measurable level of achievement, as established by a recognized system of evaluation. It is consequently required that the performance of each student in each course be evaluated by the instructor (or instructors) responsible for the course.

The final grade that assesses the performance of each student in each course will take into account the total measurable performance of the student in that course. Specifically, the grade will be given on the basis of one or more of the following:

1. Assigned work, term papers, projects, etc.
2. Class participation which, in the case of certain disciplines, may justify an attendance requirement.
3. Progress tests.
4. Laboratory tests and/or laboratory work.
5. Mid-term and/or final examinations.
6. A level of written expression may be given consideration in determining the final grade.

The weighting of the various evaluative elements is the responsibility of the instructor. At the beginning of the course the instructor will inform the class in writing of the evaluation scheme to be used. This scheme may not be altered without appropriate prior notice.

While the language of instruction in Concordia University is normally English, students have the right to write their assignments and examinations in French. It must be understood, however, that in a case where the instructor cannot read French, the assignments or examinations will have to be read by another person, with possible resulting disadvantages and delays for the student. Students are advised to enquire of the instructor at the beginning of their course whether he or she will personally read assignments and/or examinations written in French. Notwithstanding the above, language and literature departments may require assignments and examinations to be written in the language being studied.

16.3.2 GRADING SYSTEM

In each course, the instructor submits a grade for every student registered. The grades are submitted in an alphabetical form. Using the grade point equivalents listed below, grade point averages (GPA) are calculated and used for the evaluation of academic achievement, honours standing, prizes, and, in the faculties of Engineering and Computer Science and Commerce and Administration, academic standing.

Grade	*Grade Points*	
A+	4.3	
A	4.0	Outstanding
A-	3.7	
B+	3.3	
B	3.0	Very Good
B-	2.7	
C+	2.3	
C	2.0	Satisfactory
C-	1.7	

Grade	Grade Points	
D+	1.3	Marginal Pass
D	1.0	
D-	0.7	
F	0.00	Failure
R	0.00	Repeat - Failure

16.3.3 FAILING GRADES AND SPECIAL CASES

Failing Grade (F)

The grade submitted will be 'F'.

For courses in which supplemental examinations are not precluded, a student to whom an 'F' grade has been assigned and who is in good academic standing, may, subject to the regulations of the Faculty, write a supplemental examination.

For courses in which supplemental examinations are precluded, this grade will be recorded as FNS to draw attention to the absence of supplemental privilege for the course in question.

Repeat Failing Grade (R)

The grade submitted will be 'R'.

A student graded 'R' in a course may not write a supplemental examination or complete a course notated as Incomplete, and must repeat the course to receive credit, providing such repetitions are permitted within the failure regulations and/or the regulations concerning the repetition of courses.

Not Reported (NR)

'NR'—in the event that a student appears to have withdrawn, unofficially from a course, and no material is available for evaluation, the instructor will clearly not be able to submit a grade. The Registrar will indicate this situation with the notation NR (Not Reported). A student assigned an NR in a course may not write a supplemental examination. This notation denotes a failure for purposes of counting the number of failed courses in assessing academic standing. This notation carries a grade point value of zero.

Medical (MED)

MED (Medical) denotes that an examination or assignment was missed for medical reasons. This grade is entered on the record by the Examinations Office. It is the responsibility of the student to complete an 'Application for MED Grade' and submit it within ten (10) days of the missed examination (of the end of term in the case of a missed assignment) to the Examinations Office, not to the instructor, department or Faculty. Application forms are available from the Registrar's Office on either campus. An acceptable medical certificate (certified by a physician on his letterhead) must accompany the application.

The Examinations Office may require further information from the physician; in such cases an authorization form must be submitted by the student. Repeated submissions of medical certificates may lead to the referral of the student to ■ physician appointed by the University for his recommendations.

A 'MED' grade will not be assigned if the original grade or notation was either 'R' or 'NR'.

16.3.4 ADMINISTRATIVE NOTATIONS

These notations may be used only in combination with a grade given for the course (such as 'F/INC', 'F/DNW').

I. Incomplete (INC)

'INC' denotes that, though the final examination, if any, was written, work essential for the evaluation of a student's performance, such as a term paper or ■ laboratory, was not completed.

1. A student in good standing is eligible to complete a course with an INC notation subject to the limitation dates below.
2. A failed student, or ■ student with conditional standing (Faculty of Engineering and Computer Science or Commerce and Administration) is ineligible to complete a course with an INC notation.
3. A student receiving an 'R' grade with an INC notation is ineligible to complete that course.
4. An application to complete a course with an INC notation must be submitted by:
   Fall-term courses: February 1
   Winter-term courses: June 15
   Summer-session courses: October 1
5. The limiting dates for the submission of late work are:

a) For fall-term courses not later than April 1.
b) For all other courses in the Regular Session not later than August 1.
c) For all courses in the Summer Session not later than November 1.

II. Did Not Write (DNW)

'DNW' denotes that, though the instructor marked the term work, the final examination was not written.

A student in good standing who has a DNW notation on record is eligible to write a supplemental examination except if the grade assigned is 'R'.

In some circumstances, both INC and DNW may be used simultaneously.

Replacement of 'F', DNW, INC and MED Entries

The method of recording changes from 'F', DNW, INC and MED entries will be as follows:

1. In cases where a replacement examination or a late completion has been allowed on medical or compassionate grounds, the new grade will replace the original entry.
2. In all other instances, the original entry will be retained on the transcript. A second entry of the course code will be made along with the final grade.
3. Students failing a supplemental examination will receive the grade 'R'.
4. Students eligible to write a replacement examination on medical grounds, but who do not wish to avail themselves of this right, will have their records altered by the Registrar's Office from the original entry of 'F-DNW' or 'F-INC' submitted by the instructor to 'MED-DNW', or 'MED-INC'.

Did Not Enter (DNE)

'DNE' applies to courses that are properly dropped *before* the end of the course-change period.

Discontinued (DISC)

'DISC' applies to courses that are properly dropped *after* the end of the course-change period. The course will remain permanently on the student's academic record with the notation DISC. It will appear on official transcripts of the records.

16.3.5 ACADEMIC RE-EVALUATION

I. General

1. All students have the right to apply for the re-evaluation of any grade they receive. Such an application may be based on dissatisfaction with either the grade received or the method of grading. Grades may be lowered, maintained or raised as a result of the re-evaluation.
2. Students have the right to see their examination papers and any marked material that has contributed to the grading of a course. Students are responsible for the preservation and production in the case of a re-evaluation of any marked material that has been returned to them by an instructor. Students have the right to have their examination papers or any other marked material re-evaluated separately. Departments (Divisions in Fine Arts) are responsible for the preservation and production of written materials in their possession for a period of six months following the official release of grades.

II. Normal Procedure

1. Students who seek re-evaluation of their work will, in the first instance, endeavour to meet with the instructor and explain their position. If they remain dissatisfied, or are unable to meet with the instructor, they may, on receipt of the final grade for the course, apply formally for re-evaluation.
2. A formal application for re-evaluation will be made to the Registrar. Each application must be on the appropriate form, and be in writing and signed. It must set out the reasons for the dissatisfaction, and also contain a statement that the student has met with the instructor, or has tried to meet with the instructor and failed. A fee of $15 per application will be charged. This amount will be reimbursed if the application results in the grade being raised.
3. An application must be submitted by:
   Fall-term courses : February 1
   Winter-term courses: June 15
   Summer-session courses: October 1
   The registrar may extend these deadlines in particular cases, but only if the person applying for re-evaluation could not reasonably have done so within the above deadlines.
4. The Registrar will forward the application immediately to the chairman of the appropriate department, with a copy to the instructor and the Dean.
5. According to the nature of the application, the department chairman will appoint a person or persons to carry out a re-evaluation or investigation, and will communicate the name(s) to the student, the instructor, the appropriate Dean and the Registrar. Normally a member of the Faculty in whose course the student is currently enrolled is not eligible to conduct a re-evaluation or investigation. Where the department chairman was the instructor performing the evaluation the appropriate dean will make the appointments.
6. The re-evaluation or investigation will normally be completed within 21 days of the receipt of the application by the chairman.
7. The chairman will inform the student, the instructor, the Dean and the Registrar of the decision of the person(s) charged with the re-evaluation or investigation. This decision is final.

III. Priority Procedure

1. The priority appeal procedure is provided to accelerate the process for specific courses designated by the Faculties. A list of these courses is posted in the Registrar's Service Department prior to the beginning of the course-change period each term.
2. Students registered in courses that have been designated by the faculties may file a priority appeal with the Registrar as soon as the grade is known, but in no case later than 3 days before the end of the course-change period for the next term.
3. Students who opt for this priority procedure will still, in the first instance, endeavour to meet with the instructor. If the issue is resolved between the student and the instructor after an appeal is launched, the appeal must be cancelled by the student. If the appeal is not cancelled the fee of $15 will not be reimbursed.
4. The Dean will appoint a person who, in collaboration with the Registrar, will ensure accelerated processing of priority appeals in so far as possible, in accordance with the procedures set out in II, 5.

5. The re-evaluation or investigation of priority applications must be completed prior to the last day of the course-change period for the next term.

6. The Dean's appointee will inform the student, the instructor, the Dean and the Registrar of the decision of the person(s) charged with the re-evaluation or investigation. This decision is final.

IV. Appeals

1. Both the student and the instructor have a right of appeal on procedural grounds only against a re-evaluation decision.

2. An appeal will be made to the Dean and will normally be lodged within 14 days of the announcement of the decision by the chairman. Each appeal must be on the appropriate form, and be in writing and signed. It must set out the reasons for the appeal.

3. It is the responsibility of the Dean to inform the student or the instructor, as may be required, the chairman and the Registrar that an appeal has been received.

4. The Dean will refer the appeal to the Faculty Appeal Committee, a standing committee of Faculty Council.

5. Faculty Appeal Committee procedures will be determined by the appropriate Faculty Council.

6. The Faculty Appeal Committee will be composed of an equal number of faculty and students, who will choose a chairman from outside their initial membership.

7. The Faculty Appeal Committee will deal with the appeal as it deems necessary in order to decide whether the re-evaluation procedure was correctly followed.

8. The decision will normally be rendered within twenty-one days of the lodging of an appeal. If the Faculty Appeal Committee finds that the re-evaluation procedure was not correctly followed it will instruct the department chairman to arrange for a fresh re-evaluation.

9. There is no further appeal once the Faculty Appeal Committee has rendered its decision.

10. It is the responsibility of the Committee to inform the student, the instructor, the chairman, the Dean, and the Registrar of the decision.

16.3.6 EXAMINATIONS

A validated student identification card must be presented in order to sit any examination.

I. Final Examinations

1. Refer to Section 11, Academic Calendar, for the scheduled examination periods.

2. Students should not make personal commitments for the examination periods until after the *FINAL* Examination Timetable, with specific dates and times, is posted. No special arrangements will be made in the event of personal time conflicts.

3. No tests or examinations are permitted in the final week of the term. Any exceptions must be approved in advance by the appropriate Faculty Council.

II. Supplemental and Replacement Examinations—Regulations

1. Supplemental Examinations

a) Each Faculty determines the availability of supplemental examinations for the courses offered by the Faculty. Such availability is governed by the rules of the Faculty in which the course is offered, not those of the Faculty in which a student is registered.

b) A student who has received an "R" grade is ineligible to write a supplemental examination.

c) A student is not permitted to write two supplemental examinations for the same course, whether or not the course is being repeated. However, a supplemental may be written for a course being repeated if the student has not written one previously for that course.

d) A failed student, or a student on academic probation, or a student with conditional standing (Faculty of Engineering and Computer Science, and Commerce and Administration), is not permitted to write supplemental examinations.

e) Should a student fail a course for which there is no supplemental examination, the absence of a supplemental examination will be recorded together with the failing grade (§16.3.3).

f) A grade received as a result of writing a supplemental examination will count as a second course attempt. It will be included in the calculation of Grade Point Averages and in the assessment of standing under the failure regulations, as will the original failure.

2. Replacement Examinations

a) Medical reasons (certified by a physician on his letterhead) can constitute a valid excuse for missing an examination (§16.3.3).

b) A student who is taken ill during an examination and so is unable to finish it should obtain a written statement to this effect from the nurse on duty at the Health Centre, and deliver that statement within ten days to the Examinations Office.

c) A student who presents a valid medical excuse may apply to write a replacement examination which will count for the same weighting in the evaluation scheme used in the course, and will cover the same course material, as the examination that was missed.

d) A student who has received an "R" grade is ineligible to write a replacement examination.

e) A student who fails the course after writing a replacement examination may apply to write a supplemental examination.

f) A student who has missed a supplemental or a replacement examination for medical reasons may apply once more to write a replacement or supplemental examination during the next scheduled supplemental examination period.

However, after two replacement or supplemental examinations are missed because of medical reasons, the student will be required to re-register for the course. The grade assigned, either F, F/DNW or MED/DNW, will remain as the final grade in the course.

3. Applications

a) Supplemental and replacement examinations for courses taken in the Regular Session will be written in the following July or August. Supplemental and replacement examinations for courses taken in the Summer Session will be written in the following October.

b) Applications to write a supplemental or a replacement examination for a course in the Summer Session must be submitted by September 21, and for a course in the Regular Session by June 15. Graduating students have until February 1 to submit an application to write a supplemental or replacement examination for a course in the Fall Term. The appropriate fee must accompany all applications for supplemental examinations. There is no fee for a replacement examination.

c) A student who wishes to write a supplemental or replacement examination at an external centre must complete an external application form for a course in the Regular Session by June 1.

An external supplemental examination will be permitted only at university centres established in Canada.

16.3.7 FAILURE REGULATIONS*

These failure regulations are to be considered as defining the minimum standard acceptable to the University. Subject to the approval of Senate, higher standards may be established by any Faculty. For purposes of these regulations, "failure" includes the grades F, FNS, R, and NR.

I. 90 Credit Programme

1. Any student who fails courses equivalent to more than twelve credits before obtaining thirty credits on record, or who fails courses equivalent to more than twenty-four credits before obtaining sixty credits on record is a failed student. Such a student will have entered on record: "Failed. Must obtain permission to re-register from the Faculty Dean."

2. Any student who fails courses equivalent to more than thirty credits is a failed student. Such a failed student may not apply for readmission.

Such a student will have entered on record: "Failed. May not re-register."

II. Mature Entry and Extended Credit Programme

1. Any student who fails courses equivalent to more than twelve credits before obtaining thirty credits on record, or who fails courses equivalent to more than twenty-four credits before obtaining sixty credits on record, or who fails courses equivalent to more than thirty-six credits before obtaining ninety credits on record is a failed student.

Such a student will have entered on record: "Failed. Must obtain permission to re-register from the Faculty Dean."

2. Any student in the Mature Entry programme who fails courses equivalent to more than thirty-six credits is a failed student. Such a failed student may not apply for re-admission.

Such a student will have entered on record: "Failed. May not re-register."

3. Any student in the Extended Credit programme who fails courses equivalent to more than forty-two credits is a failed student. Such a failed student may not apply for re-admission.

Such a student will have entered on record: "Failed. May not re-register."

III. Independent Students

1. An Independent student is subject to the same regulations as a student in the 90-Credit Programme.

2. An Independent student who is classified as failed must obtain permission to re-register from the Registrar.

3. An Undergraduate student who is classified as failed may not re-register as an Independent student.

IV. Regulations for Failed Students

1. Failed students are neither eligible to write supplemental examinations nor entitled to late completion of courses.

2. Failed students who are given permission to re-register are placed on Academic Probation.

3. Students placed on Academic Probation must pass the next thirty credits on the first attempt and satisfy any other conditions specified for their re-admission. Students failing to meet these requirements may not apply for re-admission.

These Failure Regulations are liable to modification in the case of students transferring either between faculties or from another university.

**Students in the Bachelor of Engineering and Bachelor of Computer Science Programmes will be subject to the failure regulation published in §71.10.5 of the Faculty of Engineering and Computer Science Regulations.*

Students in the Bachelor of Commerce and Bachelor of Administration programmes will be subject to the failure regulation published in §61.20.5 of the Faculty of Commerce and Administration Regulations.

16.3.8 REGULATIONS FOR COURSES NOTATED AS INCOMPLETE

1. A student in good standing is eligible to complete a course with an INC notation subject to the limitation dates (see 4. below).

2. A failed student, or a student with conditional standing (Faculty of Engineering and Computer Science or Faculty of Commerce and Administration), is ineligible to complete a course with an incomplete notation.

3. A student is ineligible to complete a course with an incomplete notation in a course graded 'R'.

4. Application for late completion form must be submitted by:
Fall-term courses: February 1
Winter-term courses: June 15
Summer-session courses: October 1
5. The limiting dates for the submission of late work are:
a) for Fall-term courses not later than April 1.
b) for all other courses in the Regular Session not later than August 1.
c) for all courses in the Summer Session not later than November 1.

16.3.9 REPETITION OF COURSES

1. In general a student may repeat a failed course only once. However, should a course required for a programme be failed a second time, a student must appeal to the appropriate student request committee for permission to take the course a third time, or for permission to replace the required course with another. Unless such permission is granted, the student will not be allowed to continue in the University toward that programme and/or degree.

2. A student who has received credits for a completed course may not write the supplemental examination.

3. A student who has received credit for a completed course may repeat a course for personal reasons, for instance, an external requirement. The student's record will reflect the new grade, however, there will be no credit value associated with the grade. The original entry will be used for averaging purposes, except as provided by the special regulations for the Faculty of Engineering and Computer Science and the Faculty of Commerce and Administration.

4. A student who fails a course that is specifically required for a degree must take the course during the session for which he next registers. If a required course is taken for the first time during the Summer Session and is failed, a student may postpone his registration for repetition of the course until the session following the regular scheduled supplementary examination period for Summer Session courses.

16.3.10 REGULATIONS REGARDING CHEATING (UNDERGRADUATE)

I. General

1. Where the word 'examination' is used it shall be taken to cover any examination, test or similar evaluative exercise carried out under invigilation. The invigilator may be the course instructor or another person.

2. Every examination paper shall expressly list the materials that a student is permitted to have and use during the examination, such as textbooks with notations, textbooks without notations, calculators, etc.

3. Every examination paper shall expressly indicate any special conditions relating to the examination, such as permission for students to work together.

4. A student in the examination area will not speak to or otherwise communicate with another person other than an invigilator unless such communication has been expressly authorized by those conducting the examination.

5. It is the duty of an invigilator or instructor to report to the Registrar in writing any apparent instance of cheating as defined in Section II, 1 below.

6. Wherever there is doubt or ambiguity regarding any provision in these regulations, or the procedure to be followed, that interpretation or procedure shall be adopted which appears most equitable, consistent with the general purposes and philosophy of these regulations.

7. Wherever reference is made in these regulations to an official of the University and that official is unable to exercise his or her functions, the person replacing the official shall carry out those functions.

II. Procedures

1. Cheating means any dishonest or deceptive practice relating to an examination. It may include:
a) making use of any book, paper, script, writing, drawing or other material not expressly authorized by those conducting the examination;
b) possessing any book, paper, script, writing, drawing or other material not expressly authorized by those conducting the examination;
c) communicating during an examination with any person other than those invigilating the examination;
d) having another person write the examination;
e) attempting to do any of the above.

2. A student who is suspected of cheating during an examination shall be so informed by the invigilator and be required to leave the examination area immediately. The invigilator shall take charge of the student's examination book as well as of any other evidence relating to the suspected cheating.

3. The invigilator shall then offer the student the option of:
a) withdrawing from the examination, with the understanding that, if a charge of cheating is not laid or upheld, the student will be enabled to take another examination for the same course; or
b) continuing the examination under controlled conditions in another location.
c) The student shall be required to write out and sign a statement of the option taken. If the student chooses to continue the examination, the invigilator will provide a fresh examination book for the purpose and will allow additional time for the examination to compensate for any time lost during this process.

4. Any evidence shall be delivered to the Registrar as soon as reasonably possible.

5. If, after the completion of an examination, a person grading that examination finds grounds to suspect a student of having cheated, that person shall deliver to the Registrar a written statement setting out the grounds for the suspicion, together with the student's examination book and any other relevant material.

6. If the Registrar deems it appropriate to lay a charge of cheating, the Registrar shall prepare a precise, written charge, dated and signed, and send it within seven days to the Dean of the Faculty for the programme in which the student is registered, as well as to the instructor of the particular course. If the student is not registered in a programme, the charge shall be sent to the Dean of the Faculty or Division providing the course.

7. There will be established in each Faculty or Division a panel from which will be drawn the committee that will hear any charge of cheating which is denied by the student charged. This panel will consist of six members of the full-time faculty named by the Faculty Council, and six undergraduate students registered in the Faculty named by the appropriate student association or associations.

8. On receipt of a charge from the Registrar, the Dean of the Faculty or Division shall immediately send a copy of the charge to the student and inquire in writing whether the student admits or denies the charge. The letter from the Dean shall be sent to the student by registered mail at the last address given to the University.

9. The student shall admit or deny the charge in writing within twenty-one days of the mailing of the Dean's letter. The Dean may extend this delay only if the student could not reasonably have acted within the twenty-one days.

10. When the student admits the charge, the Dean shall apply one of the sanctions set out in Section III below.

11. When the student does not admit or does not respond to the charge, the Dean shall arrange for a hearing committee, giving at least 7 days' notice of the date and time of the hearing to the student.

12. The hearing committee shall consist of two faculty members and two students named by the Dean from the panel established under II, 7 above, and in addition a fifth member, named by the Dean, who shall serve as chairman.

13. The student and the Registrar, or a delegate of the Registrar, have the right to be present at the hearing of the charge, and to address the committee, but they shall not be present at the deliberations of the committee.

14. The committee shall make a written and reasoned report to the Dean giving its decision on whether or not the student acted as charged. It may recommend a sanction.

15. If the committee does not uphold the charge, the Dean shall so inform the student, the Registrar and the instructor of the course.

16. If the committee upholds the charge, the Dean shall apply one of the sanctions set out in Section III below. The Dean shall send a statement of his or her decision together with a copy of the report of the committee to the student, the Registrar and the instructor of the course.

17. The student and the Registrar shall have a right of appeal to the Senate Appeals Committee on Cheating and Plagiarism against either the decision and/or the sanction. Notice of such appeal specifying the grounds must be made in writing to the Secretary of Senate; in the case of the student within twenty-one days of the decision, and in the case of the Registrar within seven days of the decision. These delays may be extended in exceptional circumstances by the Senate Appeals Committee on Cheating and Plagiarism.

18. The decision of the Senate Appeals Committee on Cheating and Plagiarism will be final.

19. In the event that a charge against a student is not laid or is not upheld, and the student has either not continued with the examination or wishes to take a second examination, the Dean and the Registrar shall arrange for such an examination in consultation with the student.

III. Sanctions

1. Where a student admits or is found to have cheated, the sanction shall be one of the following:

a) the imposition of a failing grade for the course related to the examination in which the cheating occurred; ineligibility to write a supplemental examination for the course; and the obligation to take and pass the equivalent of one six-credit course (i.e. one full-course or two half courses) in addition to the total number of credits required for the programme. The course to be taken may be specified;

b) the sanction as provided in sub-section (a) above, and with the obligation to take and pass the equivalent of a further one, two or three six-credit courses in addition to the total number of credits required for the programme. The courses to be taken may be specified;

c) the sanction provided in sub-section (a) or (b) and suspension from the University for the remainder of the year;

d) the sanction provided in sub-section (c) and suspension for an additional period of not more than one year;

e) the imposition of a failing grade for the course related to the examination in which the cheating occurred and expulsion from the University;

2. A student who has another person write his/her examination will normally receive the maximum penalty.

3. Sitting an examination for another person is an offence chargeable under the Code of Conduct (Non-Academic).

4. A year shall begin on September 1 and end on August 31 if the charge relates to an act occurring in the Regular Session, and from May 1 to April 30 if the charge relates to an act occurring in the Summer Session.

5. Should the student not be registered in a programme, the sanction shall be either the relevant part of (a) or that provided in (c), (d) or (e).

6. If a suspended student fails the year in which he or she was suspended and wishes to be readmitted, that student must apply for readmission.

7. Should a student either admit or be found to have cheated for the second time the student shall be expelled from the University.

8. A sanction of suspension or expulsion is subject to confirmation by the Rector.

16.3.11 REGULATIONS REGARDING PLAGIARISM (UNDERGRADUATE)

I. General

1. Plagiarism, for the purposes of these regulations, means the presentation by a student of the work of another person as his or her own. It includes copying, translating and paraphrasing without acknowledgement of the source.

2. Wherever there is doubt or ambiguity regarding any provision in these regulations, or the procedure to be followed, that interpretation or procedure shall be adopted which appears most equitable, consistent with the general purposes and philosophy of these regulations.

3. Wherever reference is made in these regulations to an official of the University and that official is unable to exercise his or her functions, the person replacing the official shall carry out those functions.

II. Procedures

1. If an instructor has reason to believe that a student has committed plagiarism, the instructor shall immediately inform the student and discuss the circumstances.

2. After such discussion, the instructor shall:

a) decide that no further action is necessary; or

b) require that the work be resubmitted with appropriate changes; or

c) give the student a failing grade in the work submitted; or

d) give the student a failing grade in the course for which the work was done; or

e) refer the matter to the chairman of the department.

3. If the instructor's decision is that set out in 2(a) or (b), the matter shall be considered closed. If the decision is that set out in 2(c) or (d), the student may appeal it to the chairman of the department.

4. Should a student appeal a decision as set out in 2(c) or (d), the chairman of the department shall:

a) uphold the award of a failing grade; or

b) cancel the failing grade and require that the work be graded as originally submitted;

c) cancel the failing grade, and require that the work be resubmitted to the instructor with appropriate changes.

The chairman's decision shall be final.

5. If the matter is referred to the chairman of the department, as set out in 2(e), and an appropriate departmental committee exists or the departmental practice is to set up an ad hoc committee, the chairman shall be referred to that committee.

6. If an appropriate committee exists, the committee shall review all the circumstances with the instructor and the student, and shall:

a) decide that no action is necessary; or

b) require that the work be resubmitted with appropriate changes; or

c) decide that ■ formal charge shall be made against the student.

If the committee's decision is that set out in 6(a) or (b), the matter shall be considered closed.

7. If the matter is referred to the chairman of the department as set out in 2(e) and no appropriate departmental committee exists, the chairman shall review all the circumstances with the instructor and the student, and shall:

a) decide that no action is necessary; or

b) require that the work be resubmitted with appropriate changes; or

c) decide that a formal charge shall be made against the student.

If the chairman's decision is that set out in 7(a) or (b), the matter shall be considered closed.

8. In the event that the instructor is the chairman of the department, the Dean shall appoint another member of the department to act in his or her stead.

9. If either the appropriate committee or the chairman of the department decides that a formal charge shall be made against the student, the chairman shall send that charge to the Dean of the Faculty for the programme in which the student is registered. If the student is not registered in a programme the charge shall be sent to the Dean of the Faculty or Division providing the course.

10. The formal charge to the Dean shall be made in writing, and be dated and signed by the chairman of the department.

11. The Dean shall send immediately a copy of the charge to the student, inform the student of the procedures and sanctions relating to a formal charge, and inquire in writing whether he or she admits the charge. The letter from the Dean shall be sent to the student by registered mail at the last address given to the University.

12. The student shall admit or deny the charge in writing within twenty-one days of the mailing of the Dean's letter. The Dean may extend this delay only if the student could not reasonably have acted within the twenty-one days.

13. When the student admits the charge, the Dean shall apply one of the sanctions set out in Section III below.

14. There will be established in each Faculty or Division a panel from which will be drawn the committee which will hear any formal charge of plagiarism. This panel shall consist of six members of the full-time faculty named by the Faculty Council, and six undergraduate students registered in the Faculty named by the appropriate student association or associations.

15. When the student does not admit the charge, the Dean shall arrange for a hearing committee.

16. The hearing committee shall consist of two faculty members and two students named by the Dean from the panel established under II, 14 above, and in addition a fifth member, named by the Dean, who shall serve as chairman.

17. The student and the instructor have the right to be present at the hearing of the charge, and to address the committee, but they shall not be present at the deliberations of the committee.

18. The Committee shall make a written and reasoned report to the Dean giving its decision on whether or not the student acted as charged. It may recommend a sanction.

19. If the committee does not uphold the charge, the Dean shall so inform the student, the chairman of the department and the instructor of the course.

20. If the committee upholds the charge, the Dean shall apply one of the sanctions set out in Section III below. The Dean shall send a statement of his or her decision together with a copy of the report of the committee to the student, the instructor of the course, the chairman of the department, and the Registrar.

21. The student and the instructor shall have a right to appeal to the Senate Appeals Committee on Cheating and Plagiarism against either the decision or the sanction. Notice of such appeal must be made in writing to the Secretary of Senate within twenty-one days of the decision. These delays may be extended in exceptional circumstances by the Senate Appeals Committee on Cheating and Plagiarism.

22. The decision of the Senate Appeals Committee on Cheating and Plagiarism shall be final.

III. Sanctions Relating to a Formal Charge

1. Where a hearing committee established under II, 16 above finds a student has committed plagiarism, the Dean shall impose one of the following sanctions:

a) the imposition of a failing grade for the course in which the plagiarism occurred; ineligibility to write a supplemental examination for the course; and the obligation to take and pass the equivalent of one six-credit course (i.e. one full-course or two half courses) in addition to the total number of credits required for the programme. The course to be taken may be specified;

b) the sanction as provided in subsection (a) above, with the obligation to take and pass the equivalent of a further one, two or three six-credit courses in addition to the total number of credits required for the programme. The courses to be taken may be specified;

c) the sanction provided in subsection (a) or (b) and suspension from the university for the remainder of the year;

d) the sanction provided in subsection (c) and suspension for an additional period of not more than one year;

e) the imposition of a failing grade for the course in which the plagiarism occurred and expulsion from the University.

A year shall begin on September 1 and end on August 31 if the charge relates to an act occurring in the Regular Session, and from May 1 to April 31 if the charge relates to an act occurring in the Summer Session.

2. Should the student not be registered in a programme, the sanction shall either be the relevant part of (a) or that provided in (c), (d) or (e).

3. If a suspended student fails the year in which he or she was suspended and wishes to be readmitted, that student must apply for readmission.

4. Should a student either admit or be found to have committed plagiarism for the second time in accordance with II, 2(c); II, 2(d); II, 13 or II, 20, and subject to the results of any appeal as provided for in these regulations, the student shall be expelled from the University.

5. A sanction of suspension or expulsion is subject to confirmation by the Rector.

16.3.12 REGULATIONS REGARDING MULTIPLE SUBMISSION OF PROJECTS (UNDERGRADUATE)

I. General

1. It is the normal expectation that a project or term paper or analogous student submission for purposes of evaluation in a course shall not be submitted for evaluation in a second course. Thus, multiple submission is considered deceit unless, and only unless, the student has received prior written permission from the instructor in each of the courses in question.

2. Multiple submission, for the purposes of these regulations, means the submision by a student of the same project without significant change more than once without securing the permission of the professor(s) prior to submission of the project. Projects may include term papers, essays, submission more than once in the same and different sessions, to the same or different professors and in the same or different courses. A student intending to make changes in a previously submitted project is advised to consult with the professor concerned prior to submission. *No student may submit a similar project to one previously submitted for credit in two different courses without prior written permission from instructors in each course.*

3. Wherever there is doubt or ambiguity regarding any provision in these regulations, or the procedure to be followed, that interpretation or procedure shall be adopted which appears most equitable, consistent with the general purposes and philosophy of these regulations.

4. Wherever reference is made in these regulations to an official of the University and that official is unable to exercise his or her functions, the person replacing the official shall carry out those functions.

II. Procedures and Sanctions

1. If an instructor has reason to believe that a student has submitted, without permission, a similar project to one previously submitted in a course for which a grade had been received, the instructor shall inform the student and discuss the circumstances.

2. After such discussion, the instructor shall:
a) decide that no further action is necessary; or
b) require that the work be submitted with appropriate changes; or
c) give the student a failing grade in the project or course; or
d) refer the matter to the chairman of the department.

3. If the instructor's decision is that set out in 2(a) or (b), the matter shall be considered closed. If the decision is that set out in 2(c), the student may appeal to the chairman of the department.

4. Should a student appeal a decision as set out in 2(c), the chairman of the department, after consultation with the instructor and the student, shall:
a) uphold the award of a failing grade; or
b) cancel the failing grade and require that the work be graded as originally submitted; or
c) cancel the failing grade and require that the work be re-submitted to the instructor with appropriate changes.

5. If the matter is referred to the chairman as set out in 2(d), the chairman of the department, after discussion with the instructor and the student, shall:
a) decide that no further action is necessary; or
b) require that the work be submitted with appropriate changes; or
c) give the student a failing grade in the project or course.

6. If instructors have reason to believe that a student has submitted, without permission, the same project without significant change to two courses conducted simultaneously, the instructors shall inform the chairman or chairmen of the department(s) concerned.

7. The chairman(men) of the department(s), after discussion with the student and the instructors, shall:
a) decide that no further action is necessary; or
b) require that the work for one course be submitted with appropriate changes; or
c) give the student a failing grade in the project submitted to one course or a failing grade in one course.

8. Should a student appeal a decision as set out in 5(c) or 7(c) the chairman of the department shall refer the matter to an appropriate faculty committee which after consultation with the student, instructor and the chairman, shall:
a) uphold the awarding of a failing grade; or
b) cancel the failing grade and require that the work be graded as originally submitted; or
c) cancel the failing grade and require that the work be re-submitted to the instructor with appropriate changes.

The committee's decision shall be final.

9. Should a professor appeal a decision as set out in 4, 5, or 7 the chairman of the department shall refer the matter to an appropriate faculty committee which shall:
a) decide that no further action is necessary; or
b) require that the work be re-submitted with appropriate changes; or
c) give the student a failing grade in the project or course.

10. The composition of an appeal committee as described in 8 and 9 shall be two faculty members and two students named by the Dean and, in addition, a fifth member named by the Dean who shall serve as chairman.

11. Should a student be found to have committed multiple submission without permission a second time in accordance with 2(c) or 5(c), and subject to the results of any appeal as provided for in these regulations, the student shall be suspended or expelled from the University.

12. A sanction of suspension or expulsion is subject to confirmation by the Rector.

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17 Convocation Medals and Prizes

17.1 GOVERNOR GENERAL'S AWARD

17.2 UNIVERSITY AWARDS

17.3 FACULTY OF ARTS AND SCIENCE AWARDS

17.4 FACULTY OF COMMERCE AND ADMINISTRATION AWARDS

17.5 FACULTY OF ENGINEERING AND COMPUTER SCIENCE AWARDS

17.6 FACULTY OF FINE ARTS AWARDS

17.7 SPECIAL AWARDS

17 Convocation Medals and Prizes

17.1 Governor General's Award

The Governor-General's Medal: Presented by his Excellency, the Governor General of Canada, and awarded to the highest ranking student graduating from Concordia University.

17.2 University Awards

The Birks Medal: Presented by Henry Birks & Sons (Montreal) Ltd., and awarded to the highest ranking student graduating with the degree of Bachelor of Arts.

The Mappin Medal: Presented by Mappin's Ltd., and awarded to the highest ranking student graduating with the degree of Bachelor of Science.

The Frosst Medal: Presented by Charles E. Frosst & Co., and awarded to the highest ranking student graduating with the degree of Bachelor of Commerce.

The Administration Medal: Awarded to the highest ranking student graduating with the degree of Bachelor of Administration.

The Chait Medal: Awarded to the highest ranking student graduating with the degree of Bachelor of Engineering.

The Alfred Pinsky Medal: Awarded to the highest ranking student graduating with the degree of Bachelor of Fine Arts.

The Computer Science Medal: Awarded to the highest ranking student graduating with the degree of Bachelor of Computer Science.

The Anne Stokes Medal: Awarded to the highest ranking student graduating with the degree of Bachelor of Education in Teaching of English as a Second Language.

17.3 Faculty of Arts and Science Awards

The Robert C. Rae Book Prize in Applied Social Science: Awarded to the most outstanding graduating student in Applied Social Science.

The Canadian International Paper Company Prize for Biological Sciences: Awarded to the most outstanding graduating student in Biology.

The Celanese Canada Ltd. Prize for Chemistry: Awarded to the most outstanding graduating student in Chemistry.

The Classics Book Prize: Awarded to the most outstanding graduating student in Classics.

The Communication Studies Medal: Awarded to the most outstanding graduating student in Communication Studies.

The Sun Life Prize in Economics: Awarded to the most outstanding graduating student in Economics with the Bachelor of Arts degree or the Bachelor of Commerce degree.

The Education Book Prize: Awarded to the most outstanding graduating student in Education.

The Celanese Canada Ltd. Prize for English: Awarded to the most outstanding graduating student in English.

The Exercise Science Plaque: Awarded to the most outstanding graduating student in Exercise Science.

The French Book Prize: Awarded to the most outstanding graduating student in French.

The Bogdan Zaborski Medal in Geography: Awarded to the most outstanding graduating student in Geography.

The André Deland Medal for Geology: Awarded to the most outstanding graduating student in Geology.

The Health Education Medal: Awarded to the most outstanding graduating student in Health Education.

The Martin Lewis Memorial Book Prize in History: Awarded to the most outstanding graduating student in History.

The Interdisciplinary Studies Medal: Awarded to the most outstanding graduating student in Interdisciplinary Studies.

The Journalism Book Prize: Awarded to the most outstanding graduating student in Journalism.

The Leisure Studies Medal: Awarded to the most outstanding graduating student in Leisure Studies.

The Liberal Arts College Prize: Awarded to the most oustanding graduating student in the Liberal Arts College.

The Library Studies Plaque: Awarded to the most outstanding graduating student in Library Studies.

The Lonergan University College Prize: Awarded to the most outstanding graduating student in Lonergan University College.

The Eric O'Connor Mathematics Medal: Awarded to the most outstanding graduating student in Mathematics.

The Modern Languages and Linguistics Plaque: Awarded to the most outstanding graduating student in Modern Languages and Linguistics.

The W.R. Fraser Medal for Philosophy: Awarded to the most outstanding graduating student in Philosophy.

The Walter Raudorf Medal for Physics: Awarded to.the most outstanding graduating student in Physics.

The Renee Vautelet Prize for Political Science: Awarded to the most outstanding graduating student in Political Science.

The J.W. Bridges Medal for Psychology: Awarded to the most outstanding graduating student in Psychology.

The Boyd Sinyard Prize for Religion: Awarded to the most outstanding graduating student in Religion.

The School of Community and Public Affairs Prize: Awarded to the most outstanding graduating student in the School of Community and Public Affairs.

The Science College Prize: Awarded to the most outstanding graduating student in the Science College.

The Everett C. Hughes Medal for Sociology and Anthropology: Awarded to the most outstanding graduating student in Sociology and Anthropology.

The Theological Studies Medal: Presented by the Most Reverend Leonard J. Crowley, and awarded to the most outstanding graduating student in Theological Studies.

The Thérèse Casgrain Medal: Awarded to the most outstanding graduating student in Women's Studies.

17.4 Faculty of Commerce and Administration Awards

The Ross Medal for Accountancy: Awarded to the most outstanding graduating student in Accountancy.

The Finance Medal: Awarded to the most outstanding graduating student in Finance.

The Management Medal: Awarded to the most outstanding graduating student in Management.

The Marketing Medal: Awarded to the most outstanding graduating student in Marketing.

The Quantitative Methods Medal: Awarded to the most outstanding graduating student in Quantitative Methods.

17.5 Faculty of Engineering and Computer Science Awards

The Civil Engineering Medal: Awarded to the most outstanding graduating student in Civil Engineering.

The Computer Engineering Medal: Awarded to the most outstanding graduating student in Computer Engineering.

The Electrical Engineering Medal: Awarded to the most outstanding graduating student in Electrical Engineering.

The Mechanical Engineering Medal: Awarded to the most outstanding graduating student in Mechanical Engineering.

The Building Engineering Medal: Awarded to the most outstanding graduating student in Building Engineering.

17.6 Faculty of Fine Arts Awards

The Art Education Prize: Awarded to the most outstanding graduating student in Art Education.

The Art History Prize: Awarded to the most outstanding graduating student in Art History.

The Cinema and Photography Prize: Awarded to the most outstanding graduating student in Cinema and Photography.

The Contemporary Dance Prize: Awarded to the most outstanding graduating student in Contemporary Dance.

The Design Prize: Awarded to the most outstanding graduating student in Design.

The Music Prize: Awarded to the most outstanding graduating student in Music.

The Painting and Drawing Prize: Awarded to the most outstanding graduating student in Painting and Drawing.

The Printmaking Prize: Awarded to the most outstanding graduating student in Printmaking.

The Sculpture, Ceramics and Fibres Prize: Awarded to the most outstanding graduating student in Sculpture, Ceramics and Fibres.

The Theatre Prize: Awarded to the most outstanding graduating student in Theatre.

17.7 Special Awards (Awards are made only when merited)

The First Graduating Class Award: Presented by the first graduating class of Arts, Science and Commerce of Sir George Williams University known as the Guinea Pig Club, for the most outstanding new contribution, either academic or extra-curricular, to university life.

The Malone Medal: Presented in honour of Rev. Patrick G. Malone, s.j., and awarded to the graduating student who has made the outstanding contribution to non-academic activities.

The Loyola Campus Medal: Presented by the Loyola Alumni Assocation to a graduating student who has displayed distinctive leadership ability through both academic and non-academic achievements and has won the outstanding commendation of his/her fellows and of the faculty.

The Sir George Williams Campus Medal: Presented by the Association of Alumni of Sir George Williams to a graduating student who has displayed distinctive leadership ability through both academic and non-academic achievements and has won the outstanding commendation of his/her fellows and of the faculty.

18 Student Services

18.1 DEPARTMENT OF PHYSICAL EDUCATION AND ATHLETICS

18.2 CONCORDIA GUIDANCE SERVICES
- 18.2.1 Counselling
- 18.2.2 Guidance Information Centre
- 18.2.3 Canada Employment Centre

18.3 SCHOLARSHIP AND FINANCIAL AID INFORMATION
- 18.3.1 Concordia Entrance Scholarships
- 18.3.2 Concordia University Awards
- 18.3.3 Government of Quebec
- 18.3.4 Federal and Provincial Loans and Bursaries

18.4 STUDENT LIFE AND STUDENT SERVICES
- 18.4.1 Student Life and Student Services
- 18.4.2 Programme Development
- 18.4.3 Social and Cultural Activities
- 18.4.4 Health Services
- 18.4.5 Legal Aid
- 18.4.6 International Students
- 18.4.7 Residence and Housing
- 18.4.8 Campus Ministry
- 18.4.9 Services for Disabled Students

18.5 RIGHTS AND RESPONSIBILITIES—OMBUDSMEN'S OFFICE

18.1 Department of Physical Education and Athletics

Director
E.F. ENOS

Associate Director of Athletics
D. DAIGNEAULT

Assistant Director of Athletics
P. ARSENAULT

Assistant Director of Athletics
G. SHORT

Co-ordinator of Intramurals
R. PHILIP

The Department of Physical Education and Athletics offers a complete and diversified programme to meet the varied interests of today's students. The aim is to provide an opportunity for all students to participate and not just those who play varsity sports.

A comprehensive intramural programme operates on both campuses. It provides an extensive selection of fitness, team and sport activities for men and women under the supervision of professionally trained instructors.

The Intercollegiate Varsity programme is primarily for male and female students with playing experience. Graduate-level, as well as undergraduate, students pursuing studies on a full-time basis and meeting the requirements of the Quebec University Athletic Association and of the Canadian Interuniversity Athletic Union are eligible to participate.

The south campus is the focal point of all Physical Education and Sports on the Loyola Campus. This area includes full-length playing fields and a modern physical education centre complete with an ice arena, gymnasium, weight training and exercise rooms. The Sir George Williams Intramural programme is centered in the Victoria School gymnasium.

Detailed information on physical education and athletic activities is available at the Physical Education Centre and on the Sir George Williams Campus Athletics office located at 1822 de Maisonneuve W. For further information, telephone 848-3851, Loyola Campus, or 848-3860, Sir George Williams Campus.

18.2 Concordia Guidance Services

Director
J.A. SPROULE

Associate Director
F.W. DENTON

Loyola Campus
2490 West Broadway
Tel: 848-3555

Sir George Williams Campus:
1455 de Maisonneuve Blvd. W., Room H-440
Tel: 848-3545

Concordia Guidance Services provides the following: (1) individual and group counselling, (2) an information service, with special emphasis upon graduate and career planning, (3) Canada Employment Centre.

18.2.1 COUNSELLING

Counselling is offered in the following areas:

Academic Counselling

This includes course planning, planning a major or honours programme, university familiarization and decisions pertaining to postgraduate training.

Vocational Counselling

The individual is helped to make a realistic career choice based on his interests, abilities and other needs, reconciled with the available opportunities.

Personal Counselling

Many students have problems which are not directly related to the university environment, but nevertheless affect their sense of well-being, e.g. family problems, social problems, depression, feelings of isolation. Discussion with a counsellor is usually helpful in clarifying the issues and finding a way of coping with these problems.

18.2.2 GUIDANCE INFORMATION CENTRE

The Guidance Information Centre makes available to students and staff of the University information on educational and career planning. The major areas of the collection are devoted to directories of education programmes, university calendars, and books on career choice, job hunting and résumé-writing.

18.2.3 CANADA EMPLOYMENT CENTRE

This service, staffed and operated in cooperation with the Canada Employment Centre, functions to assist students in exploring opportunities for part-time, summer and full-time employment. Notices from employers are posted, and students are invited to discuss these with a Placement Officer who will assist in arranging interviews with employers' representatives, as appropriate.

The office is located at:

2070 Mackay Street
Tel. 283-5177

18.3 Scholarship and Financial Aid Information

General Information

The office of the Dean of Students maintains year-round staff coverage in the area of financial aid and members of the staff are available to assist students in solving individual problems or in explaining existing regulations. The Sir George Williams Campus Financial Aid Office is located at 2135 Mackay St., 3rd floor, and the Loyola Campus Financial Aid Office is located in the Administration Bldg., Room AD-130-3.

Bursaries and Loans

All students are expected to apply first to their home province or state and accept the maximum loan and bursary from these sources. Students should not that financial assistance is limited, and they are strongly advised to weigh their financial position at the start of each academic year. The basic principle of awarding financial aid is that the primary obligation in paying for an education rests with the students and their parents. This means that a student is expected to have savings from summer employment and that parents must contribute according to their ability. The Financial Aid Office exists solely to assist students and to help them find financial aid should it be required.

Graduate Awards Office

The Graduate Awards Office assists students who are seeking financial support for study or research leading to an advanced degree. A "Guide to Awards for Graduate Studies" is published by the office and is available to students seeking such assistance. Most awards are in the form of scholarships or fellowships which normally do not require repayment. These awards are usually designed to cover books, tuition, basic living expenses, and in some cases, travel to and from the University.

For further information, contact the Graduate Awards Office at 2145 Mackay St., 2nd floor.

18.3.1 Concordia Entrance Scholarships

Fall Entrance Scholarships: A number of scholarships are available to students entering their first year of full-time study. These are awarded by the University Scholarship Committee on the basis of academic achievement during the last three semesters of CEGEP or the equivalent. Applications are available from the Financial Aid Office and must be returned prior to March 1. These scholarships have a value of $1000 and are renewable for two subsequent years, providing the same high level of achievement is maintained, or until the completion of a first degree.

January Entrance Scholarships: A number of scholarships are available to students entering Concordia in January. Applications are available from the Financial Aid Office and must be returned prior to November 1. These scholarships have a value of $500 and are renewable for five subsequent semesters or until completion of a first degree.

Senior Scholarships: A number of scholarships are awarded to students entering Concordia, who are 60 years of age and over. Applications are available at the Financial Aid Office and must be returned by September 1. These scholarships have a value of $500 each per academic year and are renewable for a maximum of four subsequent years.

Departmental Entrance Scholarships

The Centre for Co-Operative Education Entrance Scholarship: Three awards of $1000 each are awarded annually, one each to students studying Mathematics, Economics, and Chemistry. Recipients are selected upon the recommendation of the Programme Director of the department after consultation with their co-op advisers and are notified in September. The award is issued in two instalments: October and January. For further information contact Director, Centre for Co-Operative Education.

The Liberal Arts College Entrance Scholarship: Apply to the Principal, Liberal Arts College.

Entrance Scholarships Offered by Companies, Associations, and Societies

The Building Trades Joint Committee Scholarship: A five-year full tuition scholarship is available to a student entering the Faculty of Engineering. Renewal is subject to maintaining a satisfactory academic standing. Applicants must be children of employees engaged in the construction industry in the District of Montreal. Apply to: The Personnel and Office Manager, The Construction Industry Joint Committee of the region of Montreal, 3530 Jean Talon W., Montreal.

Celanese Canada Limited: Several entrance scholarships in any course leading to a baccalaureate degree offered to the children of employees or annuitants of Chemcell or its subsidiary companies.

Further information and application forms should be requested directly from the Director of Awards, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa. Completed forms, in triplicate, are to be sent directly to the same address to arrive no later than June 1.

Consumers Glass Company Limited University Education Awards Plan: Open to children or wards of employees and retired employees of Consumers Glass Company Limited for a full-time course of study in any Canadian university or college recognized by the Association of Universities and Colleges of Canada. These scholarships are renewable for a maximum of four academic years, or until a first degree is obtained, whichever occurs first. Awards are automatically renewed, provided the students establish continuing eligibility and successfully complete the previous academic year. Further information and application forms may be obtained from the Director of Awards, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa.

Continental Can Company Limited (Canadian Scholarships Plan): The Carle C. Conway Scholarship is offered to the children or grandchildren of the Company's employees. Application forms should be requested from the plant managers or district sales managers. The completed forms, in triplicate, are to be sent to the Director of Awards, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa.

The Continental Insurance Companies (Canadian Scholarships Plan): University entrance scholarships in courses leading to baccalaureate degrees may be applied for by the natural or adopted children, stepchildren or legal wards of the employees of the Continental Companies operating in Canada. Further information and application forms may be obtained from the Director of Awards, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa. Applications should arrive no later than June 1.

Gulf Oil Canada Limited: Several university entrance scholarships are awarded annually to the children, natural or adopted, of employees and annuitants of Gulf Oil of Canada and its subsidiary companies in Canada. Further information and application forms should be requested from the Director of Awards, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa. Applications should arrive no later than June 1.

Imperial Oil Higher Education Awards: Imperial Oil offers, annually, free tuition and other compulsory fees to all children or wards of employees and annuitants who proceed to higher education courses. These courses may be taken at any Canadian university or other approved institution of higher learning. Each award is tenable until the completion of a first degree, or for a maximum of four years. To be eligible a student must maintain an average of 70% or more in a college year upon which application is based. Further information and application forms may be obtained from The Secretary, Committee on Higher Education, Imperial Oil Limited, 111 St. Clair Ave. W., Toronto.

Iron Ore Company of Canada (Scholarship Plan): A limited number of entrance scholarships for study towards a first degree are offered to children or wards of employees or annuitants or deceased annuitants of the parent or subsidiary companies. Further information and application forms should be requested from the Director, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa. Completed forms, in triplicate, are not to arrive later than June 1.

Leonard Foundation Scholarships: Applications for scholarships must be filed before March 31 of each year. Preference in the selection of students for scholarships shall be given to the sons and daughters of clergymen, schoolteachers, Officers, Non-Commissioned Officers and Men (active or retired) who have served in Her Majesty's Military, Naval, or Air Forces, graduates of the Royal Military College of Canada, members of the Engineering Institute of Canada, members of the Mining and Metallurgical Institute of Canada. Apply to the Senior Trust Officer, Canada Permanent Trust Company, 253 Bay St., Toronto.

Quebec Cartier Mining Company: A limited number of four-year or first-degree entrance scholarships are offered to candidates whose parents or legal guardians have been employees of the company for at least four years. Further information and application forms may be obtained from the Director of Awards, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa.

Texaco Canada Merit Scholarship Programme: Several entrance scholarships to provide up to a maximum of the first four years of undergraduate study may be applied for by dependent children, natural or legally adopted, of employees or annuitants or deceased annuitants who died while employed by Texaco Canada. Application forms may be obtained by an employee from his supervisor. Completed applications, in triplicate, must be sent to the Director of Awards, Association of Universities and Colleges of Canada, 151 Slater St., Ottawa no later than June 1.

18.3.2 Concordia University Awards

Two types of awards are available to students through the Financial Aid Office: Scholarships and bursaries. Concordia University, various foundations, corporations, alumnus, members of the University community, and friends of Concordia contribute to these awards which recognize outstanding academic achievement as well as assist needy, deserving students. Unless otherwise stated, no applications are required as recipients are recommended by department chairmen.

In-Course Scholarships

The Stacie-Lee Bessner Memorial Scholarship: Established by the Bessner family in memory of their daughter and awarded to a student entering second or third year in the Faculty of Commerce.

Canadian Women's Press Club (Montreal Branch) Scholarship: Established in 1976 and first awarded in 1977, this award is offered annually to a Journalism student entering second or third year. The award is made on the basis of scholarship, integrity and dedication to the profession of journalism. Applicants should apply to the Director of the department and must include a copy of their most current transcript as well as two articles chosen from their published or classroom work.

The Russell Breen Scholarship: Established in honour of Dr. Russell Breen for his many years of dedication and service to Loyola College and Concordia University. This award is open to all full-time students in any faculty on the basis of academic performance.

The Canadian Tire Scholarship: Awarded to a Commerce student majoring in the field of Marketing.

The Philip Cohen Music Award: Granted to a full-time student who demonstrates outstanding potential as an instrument performer. The prize is named for Philip Cohen who was greatly responsible for the development of an 'alternative' music programme at Concordia in the late 1960's. Intended for final year undergraduate and graduate level students in music, it must be awarded to any qualified student. Candidates will be asked to perform an approved programme of at least 20 minutes' duration in the presence of a departmental jury. Applications must be made to the department.

Compton-Lamb Memorial Fund: This scholarship, established in memory of the late Neil Compton and Sidney Lamb, is awarded annually in the Department of English. The recipient must be entering the last thirty credits of an English Honours programme. Application should be made to the Chairman, Department of English.

Carmine DiMichele Scholarship: This scholarship is awarded annually to a student majoring in Italian upon the recommendation of the Chairman of the Department.

The Digital Equipment Scholarship: Established by Digital Equipment of Canada Limited and awarded to an outstanding student with high academic performance in the field of Computer Science.

The Pauline Donalda Scholarship: Awarded to a full-time student in the Faculty of Fine Arts through the Montreal Opera Guild.

The Cynthia Gunn Journalism Award: Established in 1981 by family and friends to honour the memory of Montreal Star and Gazette reporter Cynthia Gunn after her death in 1980, and awarded to the best prospective journalist currently enrolled in a third-year writing workshop of the journalism programme. Applicants are judged on the basis of marks, published written work (if any), and written work produced for journalism workshops. Applications must include a current transcript, two samples of written class work and two samples of written published work. Apply to the Director of Journalism.

Henry F. Hall Scholarship: Established by the faculty and staff of Sir George Williams University in recognition of the many years of service given to the University by the late Dr. Henry F. Hall, this scholarship is awarded annually on the basis of merit to a student in any faculty of the University.

The B. Hunt Scholarship

Le Château Stores Scholarship: Awarded to a student in the Faculty of Commerce who is entering final year and specializing in Marketing.

Kodak Scholarships: These scholarships are awarded annually to Cinema and Photography students on the basis of oustanding merit in Film Production. Apply to the Chairman of the department.

McGrath-Smith Memorial Scholarship: Awarded to a student in the Faculty of Arts, majoring in Geography, with the highest marks in any two of the following courses taken during the same academic year: Forest Geography, Agricultural Geography, History of Canada and World War II, Economic Botany, and Eastern North American Flora. Recipients are chosen upon the recommendation of the Chairman of the department.

Helen McNicoll Art Prize: This prize is awarded in alternate years to third-year students who have shown exceptional talent in Visual Arts, and to third-year students who have excelled in Art History (preferably Canadian or North American). Both selections are made upon the recommendation of the Faculty of Fine Arts.

The James McQueen Scholarship: Established by the McQueen family, this scholarhip is to be awarded to an outstanding student in the Faculty of Engineering upon the recommendation of the chairman.

Myer F. Pollock Scholarship: Awarded annually to a student in the Faculty of Engineering on the basis of high scholastic achievement.

The P.T.R. Pugsley Memorial Scholarship: Established by friends of the late Professor Pugsley to commemorate his many years of service as senior Professor of the Faculty of Commerce at Sir George Williams University. This scholarship is awarded annually to an outstanding student in the Faculty of Commerce.

The Anne Savage Memorial Scholarship: This scholarship is awarded annually in memory of Anne Savage, painter and art educator. It is awarded to a deserving student in the Faculty of Fine Arts, majoring in Art Education, upon the recommendation of the Fine Arts Faculty Council. Recipients are selected on the basis of artistic and academic achievement and commitment to the vocation of teaching.

The Segal High School Scholarship: Awarded to a full-time student in any faculty or course year on the basis of high academic achievement.

The G.M. Strong Scholarship: Awarded to a full-time student in any faculty or course year on the basis of high academic achievement.

The Ruth Louise Vaughan Memorial Scholarship: Established by the Vaughan family in memory of their daughter. This award is presented annually to a student in the Faculty of Fine Arts.

The Weldon Scholarship: Awarded annually to a deserving student in the Faculty of Engineering at the discretion of the University Scholarship Committee.

The Woolworth-Woolco Scholarship: Awarded to a final-year student who has demonstrated superior qualities and abilities in academic standing and leadership presentation and who has a proven interest in retailing.

The Loyola Foundation Scholarships (In-Course): These awards are funded by the Loyola Foundation and are restricted to students whose home campus is Loyola.

The Malone Scholarships: Established in memory of Patrick G. Malone, SJ, President of Loyola College from 1959 until 1975. The Malone Scholarships are awarded to students on the Loyola Campus who have combined high academic achievement with leadership ability, commitment to and involvement in the student community.

Avon Products of Canada Book Bursary

The Lilley F. Barry Scholarships

The Gordon Bennett Memorial Scholarships: In memory of the late Mr. G. Bennett.

The Charles J. Brown Scholarship: Donated by Mr. William J. Brown in memory of his late father.

The Ursula Carling Scholarship

The Francis J. Dowling Scholarship: In memory of the late F.J. Dowling.

The Dr. Arthur Donohue Memorial Scholarship: Established in memory of the late Dr. Arthur Donohue, a graduate of Loyola College, Arts, 1928. This award is presented annually to a Science student.

The Michael and Patricia Kindellan Memorial Scholarship: Established by the Kindellan Family.

The Kenneth J. McArdle Memorial Scholarship: Donated by Mrs. Mary McArdle and offered to students in Science.

The R.C. Moore Memorial Scholarship: Open to a student who does not already possess a scholarship and is enrolled in either Honours Mathematics or Specialization in Mathematics (formerly Major in Mathematics), and entering third year. Awarded on the basis of the marks obtained in Mathematics courses taken during first and second year.

The Mrs. John Moriarty Scholarship: Established in memory of Mrs. John Moriarty.

The Winnifred O'Reilly Memorial Scholarship: In memory of Mrs. O'Reilly.

The Clarence F. Smith Memorial Scholarship: From the estate of Mrs. Elizabeth M. Smith in memory of her son.

St. Ignatius Men's Association Scholarship: Donated by members of the Association.

The James Weber Memorial Scholarship: Awarded in memory of James Weber, a member of the class of 1970.

In-Course Bursaries

These awards are made on the basis of financial need and high academic standing. Applications are available at the Financial Aid Office on either campus and should be returned no later than January 31. The value of each award may fluctuate yearly depending upon current interest rates.

The Arthur Anderson & Company Tuition Bursary: Awarded to a student entering the final year in the Bachelor of Commerce programme and majoring in Accountancy. The bursary is awarded on the basis of academic merit and demonstrated leadership qualities in the classroom and in student activities.

The Association of Alumni Bursary: Awarded annually to a student in any faculty on the basis of need and academic standing.

The Joel Birenbaum Memorial Bursary: This bursary is awarded each year in memory of Joel Birenbaum, formerly a student of Sir George Williams University. This award is offered to a needy, worthy student in the Faculty of Science.

The Birks Family Foundation Bursaries: The Birks Family Foundation has established a plan of annual contributions to the Student Aid Fund of recognized Canadian universities for the creation of the Birks Family Foundation Bursaries. These bursaries are awarded by the Foundation on the recommendation of the Financial Aid Committee, and are not restricted to any faculty or course year and may be renewed. The number and amount of awards may vary annually depending upon the funds available for the purpose from the Foundation.

The Donald Buchanan Bursary: Awarded on the basis of academic achievement and financial need to a student in any faculty.

The Henry I. Chinks Memorial Bursary: Awarded annually on the basis of need and academic standing to an evening student in the Faculty of Science, in the field of Chemistry. The recipient is recommended by the Chairman of the department.

The 3M Canada Inc. Bursary: 3M Canada Inc. makes an annual grant for bursaries to students registered full-time at the University. This award is based on satisfactory standing and demonstrated financial need.

The J.P. Copland Memorial Bursary: Awarded to a student in any faculty.

The Concordia University Non-Academic Staff Association Bursary: The CUNASA Bursary is awarded to a student in any faculty.

The Engineers Wives Association Bursary: This fund was established by the Engineers Wives Association and is awarded to a needy student, preferably in first-year Engineering.

The Professor James Gilchrist Finnie Bursary: Awarded annually to a needy student entering final year.

The Magnus Flynn Bursary: This award was established to honour Magnus Flynn and his years of devotion to Sir George Williams and Concordia universities. This award is granted to a Commerce student with high academic standing and a strong contribution to student life upon the recommendation of the Chairman of the department.

The Ernest Haznoff Memorial Bursary: Awarded on the basis of financial need to a student majoring or honouring in Philosophy.

The Ralph B. Hood Memorial Bursary: Open to any student in any faculty.

The Joseph Gilbert Joyce Memorial Bursary: This bursary is awarded to a part-time student in any faculty or course year. It is awarded on the basis of academic standing, financial need and promise in the student's chosen field of study. During his 24-year ministry at Verdun United Church, the late Reverend J.G. Joyce maintained a deep interest in the evening division of the University. This bursary is established according to his conviction that knowledge and higher education be available to those who seek to make a creative contribution to the development of mankind.

The Bruno and Stella Lebel Fine Arts Bursary: Established in memory of the late Bruno and Stella Lebel and awarded to a student in the Faculty of Fine Arts on the basis of financial need and high academic standing.

The Loyola News Memorial Bursary: Awarded annually to a spring graduate who has combined community involvement and a 70% average. The student may apply or be nominated.

The Marsh McLennan Centennial Bursary: This bursary is awarded annually to an undergraduate student who has completed at least one year at Concordia. Selection is made on the basis of need and academic standing and preference will be given to a Commerce student.

The Nathan H. Messer Bursary: Two bursaries are awarded annually to needy, worthy students entering their final year and majoring in Accountancy, Faculty of Commerce. Awards are made by the Financial Aid Committee following consultation with the Chairman of the department.

The Servi-Comp Inc. Bursary: Awarded annually, preferably to a female Commerce student, on the basis of academic standing and financial need.

The Mrs. Tony Robinson Career Enhancement Bursary: Awarded annually to an applicant 45 years of age or over who has engaged in full-time or part-time studies towards an undergraduate degree. The applicants may be permanent residents or Canadian citizens who must engage in a university programme in order to change or upgrade their career qualifications, or persons who have had an interruption in their university programme and now wish to continue. Applicants will be considered on the basis of merit and financial need. This award is made possible through the National Council of Jewish Women of Canada

The Theodore Ronis Memorial Bursary: This bursary has been established by the friends of the late Theodore Ronis to perpetuate the memory of his friendship through the annual gift of a bursary to a deserving student. The recipient should be studying preferably, but not necessarily, towards a Bachelor of Commerce degree. This award is made possible through the National Council of Jewish Women of Canada.

Royal Albert Lodge Bursary: Awarded a) to children of members of the Royal Albert Lodge, or b) to children of members of other Masonic Lodges. If neither A nor B qualify, any worthy student may apply and receive this bursary at the discretion of the Financial Aid Committee.

The St. Andrew's Society Bursary: Established by the St. Andrew's Society of Montreal for a needy student, preferably of Scottish descent, proceeding to a degree. Applicants will be required to demonstrate proof of Scottish birth or ancestry.

The Walter Stenhouse Bursary: This bursary, established by Mrs. E. Pavey and Mrs. J. Tombs, and awarded under the auspices of The Arts Club of Montreal, is available annually to a final-year student in the Faculty of Fine Arts.

The George V. Uihlein Memorial Bursary: Awarded annually to a spring graduate with an outstanding record in non-athletic extra-curricular activities and not less than a B average. The student may apply or be nominated.

The Professor J.P. Szweig Bursary: Established in recognition of the contribution of Professor Szweig to Sir George Williams and Concordia universities in teaching and student services during his 43 years of association with the universities. This bursary is awarded to a student studying the Psychology of Fitness, Exercise Science, or Behavioural Medicine on the basis of high scholastic achievement and a substantial contribution in the area of Psychology of Fitness, Exercise Science and/or Behavioural Medicine. The candidates are to be nominated by Faculty members in the Psychology Department involved in the Psychology of Fitness, Exercise Science and/or Behavioural Medicine.

Departmental Scholarships

The following scholarships are administered internally through the various departments listed below. Application should be made directly to the department chairmen.

The American Association of Cost Engineers (AACE) Award: Established in 1981, this award is given annually to a full-time Undergraduate student who has achieved the most outstanding performance in a set of three courses related to Cost Engineering: BLDG 401, BLDG 341, BLDG 491, and whose name appears on the list of potential graduates of the current year, or, failing that, to a Graduate student who has completed a thesis on a Cost Engineering topic. The award has a value of $500 plus complimentary membership in the AACE along with a one-year subscription to the journal *Cost Engineering*. This award is non-renewable.

Students must submit an application to the Undergraduate Coordinator. Graduate students must be recommended by the Graduate Coordinator and the thesis supervisor. The recipient is notified in May and awarded the cheque at the annual AACE meeting. For further information contact Dr. Kinh H. Ha, Centre for Building Studies, Undergraduate Coordinator.

The Al Cauley CJAD Electronic Journalism Grant: This scholarship was established in 1982 by Radio Station CJAD to honour long-time Montreal broadcaster Al Cauley. The scholarship is valued at $1000 and is awarded annually to a second- or third-year student enrolled in the Journalism programme and who shows promise for a career in Broadcast Journalism.

Applications should be made to the Director of Journalism, and should include a description of the student's broadcast activities and interests, a copy of a transcript and a short demonstration tape (audio or video). The award is made in April and is non-renewable.

The Silas Katz Memorial Scholarship: First awarded in 1984, this award was made possible through donations from faculty, students and staff in memory of the late Dr. Silas Katz, Professor of Mechanical Engineering.

This award has a value of $500 and is awarded to a Mechanical Engineering Undergraduate with a superior academic record, engineering initiative, and completion of between 30 and 90 credits. Selection is made by an Advisory Committee to the Chairman and recipients are notified in October. The award is renewable if the student maintains criteria for award.

For further information contact T.S. Sankar, Chairman, Mechanical Engineering.

The David Rubin Award in Judaic Studies: A bursary in the amount of $500 is awarded to an Undergraduate student in Judaic Studies. The award is made in September. For further information contact Michael Oppenheim, Chairman, Department of Religion.

The Liberal Arts College: The Liberal Arts College administers several scholarships which are awarded annually and range in value from $250 to $1000:

The Frances and David Rubin Scholarships
The Lois and Stan Tucker Scholarship
The Sir Thomas More Scholarship
The Liberal Arts College Entrance Scholarship

These awards are made possible by donations from friends of the Liberal Arts College and are based upon high academic performance. Renewal is possible providing the student maintains the criteria for the award.

For further information contact Prof. Harvey Shulman of the Liberal Arts College.

Film Production Scholarships: A number of scholarships in Film Production are offered through the Department of Cinema and Photography, Faculty of Fine Arts. For further information on what is available and how to apply, contact Professor Herman, Professor Locke, or Professor Waugh.

In-Course Scholarships and Bursaries Offered by Companies, Associations and Societies

The Harry F. Bennett Education Fund: The purpose of this fund is to make loans to deserving students who need financial assistance to enable them to study Engineering at the university level and who have proved themselves by successfully completing their first year in Engineering or the equivalent. Apply to the Engineering Institute of Canada, 2050 Mansfield St., Montreal.

The Birks Family Foundation Scholarship Fund: Tuition scholarships are available to students who are the children of employees of Birks. Applications should be made to the Birks Family Foundation.

The Canadian Federation of the Blind Bursary: Bursary assistance is awarded to registered blind people or their parents. In awarding this bursary, preference will be given to members of the Canadian Federation of the Blind and, in particular, to those people domiciled in the Province of Quebec. Apply to the Corresponding Secretary, Montreal Branch, Canadian Federation of the Blind, 1172 St. Matthew St., Montreal.

The Canadian Forces Benevolent Funds: The Canadian Forces Benevolent Funds consider applications from veterans for bursaries on behalf of their sons or daughters who are full-time students. Apply to the nearest local office of the Department of Veterans' Affairs.

Canadian Italian Business and Professional Men's Association: Bursaries are awarded by the Association to students of Italian origin or descent. Apply to the President, Trust Fund Committee, 892 Cremazie West, Montreal, H3N 1A4.

The C.J. Hewitt Bursaries: A number of bursaries are available from the estate of the late C.J. Hewitt. Preference will be given to members of the families of employees of Hewitt Equipment Limited, Montreal. For further information contact Personnel Office, C.J. Hewitt Equipment.

Hungarian Canadian Engineer's Association - Student Trust Fund: Scholarships and bursaries are awarded by the Association to students of Hungarian origin or descent. Applications are evaluated on the basis of scholastic achievement, character, career plans and financial need. Information and application forms can be obtained by writing to: Hungarian Canadian Engineer's Association, 5521 Randall Ave., Côte St. Luc, Quebec, H4V 2V7.

Lebanese Syrian Canadian Association: A series of scholarships are awarded annually to students of Lebanese, Syrian descent. Apply to the Chairman, Scholarship Committee, Lebanese Syrian Canadian Association, 40 Jean Talon E., Montreal.

R.C.A.F. Benevolent Fund: The Royal Canadian Air Force Benevolent Fund has made provisions for the benefit of former R.C.A.F. personnel and their dependents. Apply to R.C.A.F. Benevolent Fund, 5726 Sherbrooke W., No. 211, Montreal, H4A 1W8.

Concordia Emergency Loan Funds

Funds are available at the Financial Aid Office for emergency loans. The applicant should have proof of ability to repay within a reasonable time. Loans are dependent upon availability of funds. Apply to the Financial Aid Officer.

18.3.3 Government of Quebec

Student Loans and Bursaries Service

Detailed information can be found in a government published booklet "Rules for Awards of Student Loans and Bursaries". This booklet is available at the Financial Aid Office.

The individual student has full responsibility for communicating with the government and making all the necessary arrangements to process the application form. All announcements concerning deadlines, conditions and awards will be posted upon receipt, on information boards located in the Financial Aid Office, SGW and Loyola campuses.

Provincial government assistance is available in the form of guaranteed loans and bursaries, the amount of which is in accordance with the financial needs of the student. It is important for students to note that the Department of Education operates on the philosophy that the primary responsibility for financing post-secondary education belongs to the students and/or their families. Government assistance is provided to supplement family-student resources, not replace them.

Eligibility Requirements

Students are eligible for government assistance if they meet the following conditions: 1) Canadian Citizen or Permanent Resident*, 2) domiciled and residing in Quebec for one year (excluding residents of other provinces who move to Quebec to pursue their full-time studies), 3) must be enrolled full-time with principal occupation of pursuing a course of study recognized by the Ministry of Education for a duration of at least thirteen weeks per session. Full-time credit load for undergraduate students is recognized as 12 credits per term.

As well, the applicant shall not have exceeded:

A) 10 semesters of university studies to pursue a Bachelor's degree
B) 9 semesters of university studies to pursue a Master's degree
C) 12 semesters of university studies to pursue a Doctorate degree

The periods described in A, B and C are not cumulative but independent of each other.

Deadlines

The application form and all necessary supporting documents mst be forwarded to Direction Générale de l'Aide Financière aux Etudiants, by the following deadlines:

- June 30th, for regular students registering for two full sessions or for the Fall or Summer sessions only

OR

- January 31st, for regular students registering for the Winter session only.

Application forms are available at the Financial Aid Office.

Physically Disabled

Students in any faculty who are Canadian Citizens and have been resident and domiciled in Quebec for one year may apply for an outright grant if they suffer significantly and permamently from a physical deficiency, or who regularly use a prosthesis or an orthopedic device or any others means of palliating their handicap. Apply to the Financial Aid Office on either campus, tel: 848-3507 Loyola or 848-3522 SGW. Further information is available from the Services for Disabled Students office, tel: 848-3501.

Second Language Studies Bursary

This programme is intended to help anglophone and francophone university students (1st cycle) who wish to learn their second language by immersion in an environment where this language is dominant. This programe is financed by the Secretary of State according to federal/provincial agreements on the official languages.

Eligibility Criteria:

1) Canadian Citizens or Permanent Residents* and residing in the province of Quebec.

a) Be unmarried students deemed to be dependents of their parents, if the latter have elected to be residents of Quebec before the date of application for the loan or bursary.

However, unmarried students whose parents cease to have their principal residence in Quebec and take up residence in another province of Canada will not forfeit their Quebec resident status, provided that they maintain their residence in Quebec for the purpose of undertaking or pursuing their studies.

b) Be married or unmarried students deemed to be independent, or unmarried students whose place of residence in terms of that of their parents (as, for example, their parents are deceased, have disappeared or live outside Canada), provided that:

i) the students already have the status of residents at the time that they become independent

OR

ii) that the province of Quebec was the students' last place of residence for a period of twelve (12) consecutive months excluding the time they spent in pursuit of full-time study at an educational institution.

Notwithstanding this provision, married students who are unable to establish their status as residents of Quebec are deemed to enjoy such status provided that:

they and their spouse have their principal residence in Quebec and are enrolled for full-time study at an educational institution, and

that their spouse have the status of Quebec residents or if there is an agreement to this effect between Quebec and the Canadian province where they and their spouse have resident status.

2) Students must apply to full-time studies in a Canadian Educational Institution where the environment will help the students develop their knowledge of their second language.

3) Must be registered in a programme and have 75% of their course load in the second language for two consecutive semesters in the same academic year.

4) The student's mother tongue will necessarily be French or English except in the case where the student, with notice of the Ministry of Education of Quebec, will be deemed to have one or the other of these two languages.

5) Must not benefit from the official monitor programme for the year in progress.

6) Must not have done previously more than two years of study in their second language.

7) By exception, Quebec university masters level students participating in an official exchange programme with another university may benefit from this bursary when the eligibility criteria are respected.

8) Application forms with appropriate documentation must be submitted no later than June 30th. Application forms are available from April at the Financial Aid Office.

* *The term 'landed immigrant', used in the 1952 Immigration Act was replaced by the term 'permanent resident' in the 1976 Immigration Act. Individuals requiring clarification of their status regarding award criteria should refer to leaflet 40-0147, "les règles relatives aux immigrants reçus ou résidents permanents", published by the Direction Générale de l'Aide aux Étudiants (available at all educational institutions).*

Summer Immersion Language Programme

Bursaries will be granted to students across Canada to enable them to enroll in six-week immersion courses in French or English at accredited institutions.

The aim of this programme is to provide post-secondary students with the opportunity to learn one of Canada's official languages as their second official language and to improve their knowledge of the culture represented by that language. Candidates whose mother tongue is neither French nor English may not receive bursaries to study English or French as their first official language.

The bursaries will defray the cost of tuition, instructional materials, and room and board, but will not cover transportation costs or pocket money.

Inquiries regarding the awarding of bursaries (e.g., eligibility, etc.) should be made to your provincial coordinator or territorial official, the names and addresses of which are available at either Financial Aid Office.

Students are eligible if they meet the following conditions:

a) Are Canadian Citizens or have permanent residency status at the time of application. Students studying in Canada on visas are not eligible.

b) Have general post-secondary standing or can prove that they will have obtained such a status by the time they become involved in the programme.

c) Were enrolled as full-time students during the last academic year.

Official Language Monitor Programme

Monitors are students who help students with the spoken language by conveying to them the real life aspect of the language and awareness of the culture associated with that language. They carry out their duties under the supervision of second-language teachers for six to eight hours per week through supplementary non-teaching activities. Monitors can receive up to $3000 for eight months' participation in the programme (September to April). They are also reimbursed should they need to travel to and from another province in order to participate in the programme. For further information contact the Financial Aid Office.

18.3.4 Federal and Provincial Loans and Bursaries

In all cases a basic qualification is that applicants must be Canadian Citizens or Permanent Residents with one year's residency, without pursuing full-time studies, and domiciled in the province to which they apply.

When a student applies for financial assistance from a government, Canadian or non-Canadian, and when certification of the student's status is required on such an application form, this certification is obtained from the Financial Aid Office.

In all provinces except Quebec, the provincial authority listed below administers the Canada Student Loan Plan (federal) as well as their own programme.

List of Appropriate Provincial Authorities

ALBERTA
Student Finance Board
10th Floor Baker Centre
10025 106 Street
Edmonton, Alberta
T5J 1G7

BRITISH COLUMBIA
Student Services Branch
Ministry of Education
835 Humboldt St.
Victoria, B.C.
V8V 2M4

MANITOBA
Student Aid Branch
Box 6, 693 Taylor Ave.
Winnipeg, Man.
R3M 3T9

NEW BRUNSWICK
Department of Youth and Recreation
P.O. Box 6000
Fredericton, N.B.
E3B 5H1

NEWFOUNDLAND & LABRADOR
Canada Student Loans Authority
Department of Education
Confederation Building
St. John's, Newfoundland

NOVA SCOTIA
Department of Education
Student Aid Office
P.O. Box 578
Halifax, N.S.
B3J 2S9

PRINCE EDWARD ISLAND
Canada Student Loans Committee

Department of Education
P.O. Box 2000
Charlottetown, P.E.I.
C1A 7N8

YUKON
The Student Financial Assistance Awards Committee
Superintendent of Education
Box 2703
Whitehorse, Yukon Territory
Y1A 2C6

NORTHWEST TERRITORIES
Department of Education
Student Services Section
Yellowknife, N.W.T.
X1A 2L9

ONTARIO
Students Awards Office
Ministry of Colleges & Universities
Mowat Block Queen's Park
8th Floor
Toronto, Ontario
M7A 2B4

SASKATCHEWAN
Saskatchewan Advanced Education
and Manpower
Student Financial Services
1855 Victoria Ave.
Regina, Sask.
S4P 3V5

Children of War Dead Act

Under this act, fees up to $800 and monthly allowances are provided for children of Canadian war veterans whose death was attributed to military service in World War I, World War II, or the Korean War. Apply to the Superintendent of Welfare Services at the nearest D.V.A. District Office.

United States Students

Students coming to a university outside the United States may apply for a Higher Education Loan Plan loan through their hometown bank. These forms must be sent to Concordia University to be completed. They should be sent to the campus where the student will register. Because of limited funds available, it is essential that students apply as early as possible.

Financial Aid for Overseas Students

The scholarships, bursaries and loans offered by the University, companies, associations, societies, foundations, departments of education, and other government agencies are generally not available to students from overseas. Therefore, students, studying on a student visa who require financial aid should contact their own department of education.

The Canadian International Development Agency offers training assitance to most developing countries with which Canada has a cooperative agreement, however students must be nominated by their own government.

Scholarship Committee
Human Resources Directorate
Canadian International Development Agency
200 Promenade du Portage
Hull, Quebec K1A 0G4

Students should try to ensure adequate finances before coming to Canada. If students do not plan to return to their homeland during the summer, four additional months of living expenses should also be provided for.

18.4 Student Life and Student Services

Dean of Students
B.T. COUNIHAN

Assistant Dean
D. INSLEAY

Financial Aid
R. COTE

International Student Adviser
F. FRANCIS

Co-ordinator of Handicap Services
A. KERBY

18.4.1 STUDENT LIFE AND STUDENT SERVICES

Many para-academic and out-of-class programmes are organized on each campus under the auspices of the Dean of Students. These programmes are designed to enrich students' cultural and social life and broaden their university experience.

Also available are special services such as legal aid, health centres, and housing bureaus.

The Concordia Council on Student Life, a body responsible for student service policies and budgets, studies the range of student life on both campuses. It is composed of 8 students, 2 faculty members, 6 members of the student services staff. The Vice-Rector, Services chairs the Council. Its meetings are open to all members of the University community.

18.4.2 PROGRAMME DEVELOPMENT

The *Lacolle Centre for Educational Innovation* is a one hundred and fifty year old farmhouse, occupying 20 acres of lawn and woodlot about forty miles south of Montreal. It accommodates twenty-four people comfortably with four bedrooms, three meeting rooms, and a fully-equipped kitchen. It was established by the Loyola Campus of Concordia University in 1971, with the purpose of extending the university experience by replacing some of the usual restrictions of a classroom setting with an informal community. This environment is designed to promote the development and understanding of relationships among people, as well as to provide an opportunity to explore new and creative approaches to learning. The primary goal of the Centre is to insure that its users will, by working collaboratively at Lacolle, discover ways to enhance their educational pursuits on the university campus.

It is available for use to anyone within the Concordia community wishing to enrich classroom education, develop effective work groups or conduct organizational meetings. Potential programmes at the Centre are limited only by the imagination and resourcefulness of its users. Professional assistance is available to assist in turning ideas into reality. We can help you in any aspect of an intended programme. There is a fee of $25 per day for use of the Centre.

Montreal Lacolle Centre
2492 West Broadway
Tel: 848-4955

18.4.3 SOCIAL AND CULTURAL ACTIVITIES

Orientation

Orientation is designed to familiarize new students with the various services and facilities available to them, and to help new students resolve any problems that may be encountered during their introduction to university life.

Social and Cultural Activities

In addition to the social and cultural activities of the Concordia orchestra, choir and jazz ensemble there is available a record and sheet-music lending library.

The Workshop provides a para-academic experience in the fields of photography and silk screen printing. Workshop members partake in weekly seminars and have an opportunity to use fully-equipped darkrooms, silk screen equipment and an exhibition hall.

The Workshop 2480 West Broadway
Tel: 848-3511

There is a students' cafeteria and pub on each campus. The Loyola Campus Centre also provides lounge facilities and a games room.

18.4.4 HEALTH SERVICES

The Health Centres provide an individualized and comprehensive approach to Health Care including counselling and teaching related to physical and mental health. They operate on a clinic basis with a varying schedule of doctor coverage. Nurses who are experienced in dealing with health

concerns of university students are available without appointment. Appointments with the various physicians can be made in consultation with a nurse. For those areas which are not within the realm of the Health Services, referral to existing community resources and specialists is arranged. Services of the Health Centres are available to all students, staff and faculty both full- and part-time.

Loyola Campus
Centennial Building, Rm. 101
Tel: 848-3575

Sir George Williams Campus
2145 Mackay Street
Tel: 848-3565

Office Hours:
9:00 a.m. to 5:00 p.m. Monday to Friday
Closed from 12:00 noon to 1:30 p.m. Monday to Friday, except for emergencies.

18.4.5 LEGAL AID

Advice and help are offered to students requiring assistance on matters relating to their legal rights. An appointment to see a lawyer can be arranged on either campus.

Commissioners of Oaths are also available.

Loyola Campus
Legal Information Office
Central Building, Room 326
Tel: 848-4960

Sir George Williams Campus
Dean of Students Office
Annex M, 2135 Mackay Street
Tel: 848-3516

Annex PR, Room 100
2100 Mackay Street
Tel: 848-4962

18.4.6 INTERNATIONAL STUDENTS

The International Student Adviser is the contact person for International students. The International Student Adviser provides information to International students regarding matters pertaining to the Canada and Quebec departments of Immigration, including Student Authorizations (Federal), Certificats d'Acceptation (Provincial) and travel visas. A member of the Dean of Students' Office, the International Student Adviser performs a pivotal role in coordinating a variety of activities relating to International students.

Academic and para-academic problems and counselling are either referred to an appropriate area in the University or handled by the International Student Adviser. All students are encouraged to contact the International Student Adviser's Office prior to entering their Undergraduate programme:

International Student Adviser
Sir George Williams Campus
2135 Mackay Street, M-106
Tel: (514) 848-3514

International Students' Health and Accident Insurance

Students on Student Visas are not eligible for the provincial medical programme. The high cost of hospital care in Quebec has prompted Concordia to arrange for an insurance policy which covers hospital expenses incurred as the result of accidental injury or an illness. The premium for this policy is approximately $365 (1985-86). This policy is compulsory for all International students attending Concordia as full-time students. The plan provides either single or married coverage. For details about the coverage, contact the Dean of Students Office.

Cost of Study and Living for International Students

It is imperative that you have sufficient funds while studying in Canada as there is, in general, NO supplementary funding available to International students. DO NOT, therefore, attempt to undertake your studies unless you are assured of substantial funding for the entire length of your programme.

The following table will assist you in preparing your budget for study in Canada. Important factors to be considered in calculating your budget are currency fluctuation, exchange rates and inflation. It is advisable to consult with your bank official for advice on this matter.

The bare minimum average cost for eight (8) months in Canada (i.e., September through April) is approximately $13,665. This estimated cost is based upon a student living a moderate lifestyle and NOT sharing expenses (i.e., accommodation, food, telephone, etc.). We have found it in the best interest of International students to consider this amount as the "minimum required" for each Fall and Winter term.

Cost of Living - Eight Months (Fall and Winter Academic Terms)

Tuition and Fees* (30 credits)	$ 6300
Books and Supplies	$ 450
Groceries**	$ 2300
Clothing	$ 600
Transportation	$ 350
Medical Insurance*	$ 365

Lodging	$ 2500
Miscelaneous Expenses	$ 800
TOTAL (Canadian Dollars)	$13665

*Indicates a fixed cost
**Indicates an estimated cost based on the Quebec averages.

Certain International students may be eligible to pay the same fees as Canadian students. Detailed information may be obtained from the Accounts or Admissions Offices.

International students are required to present evidence to immigration authorities that they have adequate funds for their studies in Canada.

NEITHER CONCORDIA NOR THE CANADIAN GOVERNMENT PROVIDES FINANCIAL ASSISTANCE TO INTERNATIONAL STUDENTS.

A STUDENT MUST BE A CANADIAN CITIZEN OR A LANDED IMMIGRANT, OR HOLD A VALID WORK PERMIT IN ORDER TO WORK IN CANADA.

18.4.7 RESIDENCES AND HOUSING

RESIDENCES—Loyola Campus Only

Two buildings provide on-campus accommodation for 250 students. Hingston has a modern dormitory style while Langley has traditional apartment-styled rooms. Both halls are co-ed with the exception of an all-women section in Langley. Rooms are furnished. Communal kitchens and public telephones are on each floor. Lounges have colour T.V.'s while games rooms have pool and ping pong tables. Laundry facilities and personal mailboxes are located in each building. Many activities and outings are especially organized for resident students.

By law, students are required to sign leases. These leases will follow the academic year (September to May). Students wishing to contract for only one semester can apply for special arrangements.

Residence Fees

Room rates are the same at both Hingston and Langley Halls. The 1985-86 Room Rates are as follows: (These rates do NOT include meal service.)

Single Room	$1,470 ($183 a month)	Double Room	$1,264 ($158 per person a month)

While effort will be made to meet special requests for specific rooms or particular locations, assignments will depend upon availability of space. Since the number of rooms is very limited, applications should reach the Director as soon as possible. Since **acceptance to the University does not guarantee admission to residence,** a separate application for on-campus housing must be sent to:

Ms. Debbie MacAskill
The Director of Residences
Room 156, Hingston Hall
Loyola Campus
Concordia University
7141 Sherbrooke Street West
Montreal, Quebec, H4B 1R6

OFF-CAMPUS HOUSING

Loyola Campus:

Those students wishing to find off-campus accommodations near Loyola should check the "Off-Campus Housing Listings" Board outside Room 158 in Hingston Hall.
Tel: 848-4755

Sir George Williams Campus

For further information contact:

Office of the Dean of Students
Annex M, 2135 Mackay Street
Tel: 848-3517

CHILD CARE

Child Care Services are offered for children of students, faculty and staff. Parents may enroll children 2½ to 5 years of age in the Child Care Centre located at 2305 St. Marc St. Application forms and details may be obtained at the information desk in the Hall Building or at the Centre. Tel: 848-8789.

18.4.8 CAMPUS MINISTRY

Campus Ministry offers programmes and pastoral services for the University community. Chaplains work with students, staff and faculty integrating and assimilating common concerns into worship, studies and prayer. It is an ecumenical ministry representing the major religious denominations. Chaplains are available for spiritual direction and pastoral counselling. The Loyola Chapel is for public worship, as well as a quiet place for private reflection.

Offices are on both campuses:

Loyola Campus
Belmore House
(Behind Campus Centre)
Tel: 848-3588

Sir George Williams Campus
Hall Building, Room 333
1455 de Maisonneuve West
Tel: 848-3591

18.4.9 SERVICES FOR DISABLED STUDENTS

Special services are provided on each campus for students with physical disabilities. Services include special orientation, maps, assistance in classroom adaptation, accessibility guides to the campuses, equipment resources including IBM Personal Computer and Apple IIE with voice, advocacy services, volunteers, and inter-campus transportation. A resource library is available to students and faculty in the Coordinator's office at Loyola and in the Centre office at Sir George Williams.

Loyola Campus
Administration Bldg., Room 121-3
Tel: 848-3501

Sir George Williams Campus
Hall Building, Room 580-2
Tel: 848-3524 - Voice & TTD

18.5 Rights and Responsibilities—Ombudsmen's Office

CODE OF CONDUCT (NON-ACADEMIC)—CONCORDIA UNIVERSITY

NOTE: The Code of Conduct (Non-Academic) is under review as this calendar goes to press. It may be modified prior to publication. For information please contact the Code Administrator or the Ombudsmen's Office.

PART I

General

1. The Concordia University Code sets out regulations and procedures for handling formal complaints made by one member of the University against another member either personally or on behalf of the University. The ombuds operation is part of the code, and the whole is subject to a supervisory board.

2. The code applies to all the premises of the University, whether owned or rented, and also to activities conducted elsewhere by the University or by a body responsible to the University.

3. The code applies to all students, faculty and staff of the University, whether full-time or part-time. Both independent and Continuing Education students are included. However, persons working on University premises under contractual agreement between the University and their direct employer, such as the employees of catering and maintenance services, do not come within the code.

4. The code does not supersede the terms of tenure and associated regulations, the University grievance procedure, or any collective agreement signed by the University. The code does not replace or supersede any of the academic regulations or procedures of the University or of the University library. However, the mandate of the ombuds office includes the right of inquiry into the application of any of the regulations or procedures apart from those covered by a collective agreement with a certified bargaining unit.

5. Disciplinary authority in the University is vested in the Board of Governors. It remains the duty, as well as the right, of faculty members and administrators to exercise such authority in areas or matters within their own jurisdiction. Faculty members are expected to take whatever immediate action is needed to ensure the continuing order of their courses and administrators to take whatever immediate action is needed to ensure the proper functioning of the services or areas for which they are responsible.

6. The Rector, as chief administrative officer of the University, and only the Rector or his duly appointed delegate, has the right to suspend temporarily a student or member of the faculty or staff consequent upon action taken in line with paragraph 5. In the event of such a temporary suspension, appropriate procedures for final disposition of the situation will be set in motion as soon as possible.

7. Although faculty members or administrators may take immediate action of the kind referred to in paragraph 5 above, a person against whom such action is directed and who believes the action unjustified may have recourse to the complaint procedures.

8. All those who study, teach or work at the University are subject to the laws of the land, and have recourse to those laws. The same holds true for the University as a corporate entity. Should an act appear to infringe an individual's legal rights, that individual can decide whether to take legal action irrespective of whether recourse has been had to the provisions of this code. Similarly, the University, acting through its authorized representatives, has the right at any time to take whatever legal action is deemed appropriate.

9. Should there arise doubt or ambiguity regarding any provision in these regulations, or the procedure to be followed, that interpretation or procedure shall be adopted that appears most equitable, consistent with the philosophy and general purposes of the code.

Governing Principles

10. The University is an institution of higher education dedicated to the pursuit of truth and to the advancement and dissemination of knowledge. All those who study, teach or work at the University must be concerned with maintaining the freedoms essential for those purposes, notably the freedoms to teach; to engage in research and to create; to learn; to study; to speak freely; to associate and to assemble; to write and to publish. The rights deriving from these freedoms cannot be maintained unless related responsibilities are accepted.

11. The University has the rights of a duly incorporated institution of higher education, and it has responsibilities to those who are part of it, as well as to the community at large. Each member also has rights and responsibilities—in relation to other persons, the institution and the community. Mutual consideration is vital if the freedoms are to be preserved.

12. Members of the University shall have regard in particular for the rights of other members to: freedom from discrimination on such grounds as sex or sexual orientation, religious or political beliefs, racial or ethnic origin; freedom from violence, intimidation, and sexual harassment; the safeguard of dignity, reputation and honour; access to University premises; respect for property,

whether personal or owned by the University for the benefit of the community; confidentiality of personal information.

12.1 The rules of natural justice will apply to all hearings under this code.

Administration of the Code

13. Any person who wishes to make a formal complaint must deliver the signed complaint in writing to the Code Administrator.

14. The individual complained against must be named, and the cause of the complaint must be stated with precision, detailing date, time and place.

15. The complaint must be delivered within a reasonable time of the alleged act, incident or other cause, and in no case more than two months after it. However, when the complaint involves an allegation of deception or dishonesty, this delay will begin to run from the date of discovery of the alleged deception or dishonesty.

16. There will be a Code Administrator, appointed by the Rector acting on the recommendation of an advisory committee composed equally of students, faculty and staff. The appointment will be for two years, and be renewable.

17. The Code Administrator will ensure that all complaint procedures are properly carried out.

18. The Code Administrator will issue yearly a public report indicating the nature and extent of the complaints received and handled, while protecting the anonymity and confidence of any individuals.

19. The Code Administrator will direct complaints against a member of the faculty or the staff to the appropriate authority under the General Complaint Procedures (Part III).

20. Complaints against a student will normally be handled under the Hearing Board System (Part II). However, the Code Administrator has the authority to decide that the nature of a complaint against a student is grave enough to warrant directing it to the appropriate authority under the General Complaint Procedures (Part III). This latter procedure will normally be the case with a complaint involving sexual harassment.

21. The Code Administrator also has the authority to investigate a complaint against a student and to attempt to settle that complaint before referring it to the Hearing Board System. In performing this function, the Code Administrator has the authority to impose a sanction within the range and regulations set for the Hearing Board System. (See Part II, paragraph 29 below).

22. The Code Administrator will inform both parties in writing of the findings of any investigation conducted under paragraph 21 above, including any sanction that is imposed.

23. If either party then refuses to accept either the findings or the sanction, the Code Administrator will forward the complaint to the Hearing Board System.

PART II

Hearing Board System

24. The two-stage system on each campus consists of campus boards and appeal boards.

25. Members of the boards will be drawn from a pool of forty students of whom at least seven are to be resident students. There will be twenty students chosen from each campus. Members may sit on either campus but the majority on any board will be drawn from the campus on which the incident took place. Should the incident giving rise to the complaint take place in a residence, the majority will be drawn from resident students.

26. The pool will be named annually, after due public call for candidates, by a nominating committee composed of four representatives of the Concordia University Students Association and one representative of the Graduate Students Association. The Code Administrator will act as non-voting chairman.

27. A campus board, composed of three members, will hear any complaint forwarded to it by the Code Administrator, and find either for or against the student complained against. A campus board has the authority to impose sanctions as set out in paragraph 29 below. An appeal may be taken against the decision of a campus board, whether on the finding or the sanction.

28. An appeal board, composed of five other members, will hear any appeal against the decision of a campus board. It will either confirm, reverse or modify the finding of the campus board, and confirm, reverse or modify the sanction. It has the authority to require a re-hearing by another campus board. There is no further appeal from a decision of the appeal board.

29. Hearing boards may impose sanctions within the following limits: a fine not exceeding $100; a deposit with related conditions, returnable at a specified date, not exceeding $200; payment not exceeding $500 as compensation for injury or damage to or loss of property; exclusion from an area or function of the University for a stated period of time. If this exceeds twelve months, the sanction will be reviewed by a campus board at the end of each twelve-month period. (This sanction does not encompass the authority to suspend from any academic activity.) The deposit mentioned in this article may be forfeited should any conditions imposed by the Board be found to have been violated.

30. The Code Administrator is responsible for the operation of the hearing boards, including convening each board as it is required and arranging for the appropriate recording of procedures, and ensuring that all complaints, notices, decisions and appeals are properly processed.

31. Each hearing board will sit as soon as possible, and generally, within fourteen days of the referral of a complaint or appeal to it by the administrator except in the case of a hearing involving an incident that took place in a residence when the parties will receive at least two days notice. The parties will receive at least seven days notice in writing of the sitting and copies of the complaint or appeal.

32. Each hearing board will deliver its decision in writing to both parties as soon as possible and, generally, within seven days of the conclusion of a hearing except in the case of a hearing involving an

incident that took place in a residence when, generally, the decision will be delivered within three days of the hearing.

33. An appeal against a decision of a campus board must be lodged in writing, setting forth the grounds for the appeal, with the Code Administrator within fourteen days except in the case of an incident that took place in a residence, when the appeal must be lodged within five days.

34. The decision of a hearing board, if it is not unanimous, will be by majority vote.

35. Hearings will be closed and confidential unless a board, with the written consent of both parties, decides to admit members of the University community.

36. At a hearing by a campus board or an appeal board both parties have the right to be accompanied by an adviser, who may speak on their behalf.

37. At a hearing by a campus board both parties have the right to present witnesses.

38. In all other matters the hearing boards will determine their own procedures.

PART III

General Complaint Procedures

39. Where a complaint is to be handled under the General Complaint Procedures, the Code Administrator will forward it to the appropriate authority and send a copy of the complaint to the person complained against.

40. A complaint against a member of faculty or a person employed in a Faculty or the Graduate Studies Office will be forwarded to the appropriate Academic Dean.

41. A complaint against a student will be forwarded to the appropriate Academic Dean or to the Director of Continuing Education.

42. A complaint against the Rector will be forwarded to the Chairman of the Board of Governors.

43. In the event of a complaint against any other employee of the University, the appropriate authority is the senior administrator in the following list to whom the person complained against reports most directly:

a) Rector
b) Vice-Rector, Academic
c) Vice-Rector, Institutional Relations and Finance
d) Vice-Rector, Services
e) Assistant Vice-Rector and Treasurer
f) Assistant Vice-Rector, Physical Resources
g) Assistant Vice-Rector, Supplies and Services
h) Assistant Vice-Rector and Director of Libraries
i) Assistant Vice-Rector and University Registrar
j) Assistant Vice-Rector and Director of Continuing Education
k) Director of Ancillary Services
l) Director of Admissions
m) Director of Athletics
n) Director of Computer Centre
o) Director of Guidance
p) Director of Human Resources
q) Dean of Students
r) In the event of a complaint of sexual harrassment, the appropriate authority is a Vice-Rector named by the Rector.

43.1 In the event that the senior administrator fails to inquire into the complaint, the Code Administrator may refer it to his or her superior.

44. Where a complaint against a student is dealt with under these general complaint procedures, the Code Administrator will inform the appropriate Dean of Students. If the complaint is against a graduate student, the Code Administrator will also inform the Dean of Graduate Studies.

45. If one of the persons named as an appropriate authority has lodged a complaint against a person within his or her sphere of authority, that complaint will be forwarded to the complainant's own superior.

46. The appropriate authority will acknowledge receipt of the complaint as expeditiously as possible and send copies of such acknowledgement to the person complained against and the Code Administrator, as well as to the Dean of Students and to the Dean of Graduate Studies when applicable.

47. The complaint shall be inquired into in whatever manner the appropriate authority considers suitable having regard to the principles of natural justice. The appropriate authority may conduct the inquiry personally or may assign it to another individual or to a committee. If the appropriate authority or the individual or the committee decides that the allegations are founded in whole or in part, the appropriate authority shall take whatever action is deemed suitable in so far as he or she is empowered to do so, or recommend such action to those who have the power to implement it. If the inquiry has been assigned to an individual or to a committee, the appropriate authority may also assign to that individual or committee the function of taking or recommending appropriate action. Since a student can be suspended or expelled from the University only by action of the Rector, any such recommendation must be forwarded to the Rector. (Should it be recommended that a faculty member be dismissed, the dismissal provisions of the Regulations relating to Termination of Employment and Suspension of Faculty Members and not the provisions of paragraphs 50 to 55 below shall apply.)

48. Both the complainant and the person complained against must be given the opportunity to make any relevant representation, in person or in writing as they see fit.

49. The decisions referred to in paragraph 47 must be written, signed and dated, and must be reasoned. The appropriate authority shall deliver such decisions to the complainant, the person complained against, the administrator to whom the appropriate authority reports and the Code Administrator as well as to the Dean of Students and the Dean of Graduate Studies when applicable. The Chairman of the Board of Governors shall deliver any decisions to the Board as a whole.

50. Both the complainant and the person complained against have a right of appeal to the Board of Governors. A written and signed notice of appeal must be delivered to the Secretary of the Board of Governors within fourteen days of the rendering of the decision appealed against. This delay may be extended in exceptional cases by the Board upon an application in writing, but it shall not be extended unless the appellant could not reasonably have acted within the fourteen days. The appeal may be taken against either the decision on the merit or against the action taken or recommended, or against both. The notice must state in clear and precise terms the ground on which the appeal is based.

51. The Secretary of the Board of Governors shall send without delay copies of the notice of appeal to the appropriate authority responsible for the decision which is being appealed, to the opposite party and the Code Administrator as well as to the Dean of Students and the Dean of Graduate Studies when applicable. The appeal shall be placed on the agenda of the next meeting of the Board.

52. Should the appeal be lodged by the complainant, or should it be lodged by the person complained against in a case where action other than a sanction of suspension, expulsion or dismissal has been imposed or recommended, the Board of Governors shall decide whether to deal with it directly or to set up a review board, composed of persons from either within or without the University or from both, as the Board of Governors judges fit. The decision of the Board of Governors in the former case or of the review board in the latter case shall be final.

53. Should the person complained against wish to lodge an appeal in a case where a sanction of suspension, expulsion or dismissal has been imposed or recommended, he or she may elect that the appeal be dealt with according to the procedure set out in the above paragraph or may require the Board of Governors to appoint a committee of three persons from outside the University, one of whom must be a lawyer not otherwise in the employ of the University, to hear the appeal. The decision shall be final.

54. Where the choice referred to in paragraph 53 is not made, the Board of Governors shall decide whether to deal with the appeal according to the procedure set out in paragraph 52 or that set out in paragraph 53.

55. The Secretary of the Board of Governors shall communicate the decision in writing to the persons referred to in paragraph 49.

56. Wherever an official of the University is unable to exercise his or her functions, they will be carried out by that official's replacement.

57. Apart from the requirements to inform set out above, any proceedings or decisions shall be treated as confidential unless all the parties involved expressly agree that they be made public.

57.1 All delays mentioned in this Code may be extended in exceptional circumstances at the discretion of the Code Administrator.

PART IV

Ombudsmen

58. The ombuds office will consist of one full-time and two part-time ombudsmen. The office will operate on both campuses. The ombudsmen will be appointed by the Rector, acting on the recommendation of an advisory committee composed equally of students, faculty and staff. Appointment will be for two years, renewable on the recommendation of the advisory committee.

59. The part-time ombudsmen must be persons already in the employ of the University, and one of them must be a tenured member of faculty. Part-time ombudsmen will be partially released from their other duties, or be appropriately compensated.

60. Anyone who studies, teaches or works at the University has the right to apply to the ombuds office. The members of the office will decide who will handle any particular application.

61. The ombudsmen are free to inquire into any matter brought to their attention, and to make whatever recommendations they judge appropriate, and to whomever within the University they feel should receive them. If all the ombudsmen agree, they are also free to inquire into a matter that has not been the subject of a specific application. The ombudsmen should pay particular attention to the definition of their functions set out in Part I (General), paragraph 4.

62. A part-time ombudsman will avoid personal involvement in any case where there may be a conflict of interest and will refer such a case to another ombudsman.

63. On the conclusion of an inquiry, the ombuds office will on request provide an individual who applied for its services with a written report on its disposition of the matter.

64. The ombudsmen have the right to refuse to take up any case where they judge their intervention would be inappropriate, or to withdraw from a case if their continued intervention appears inappropriate, as when there has been recourse to legal proceedings. They will provide the applicant with a written statement of the reasons.

65. Recommendations of the ombudsmen may bear either on the actions or decisions of an individual or group or on the policies and practices which gave rise to such actions or decisions.

66. Any application to an ombuds office and any consequent inquiries or recommendations shall be treated as confidential unless all the parties involved expressly agree that the information be made

public. Notwithstanding the above, the ombudsmen are entitled after an enquiry to publicize their recommendations if they all agree that the response to these was unsatisfactory.

67. The ombudsmen shall have immediate access to all University records, reports or other documents other than those which cannot be released for reasons of confidentiality. An ombudsman can appeal the decision of an officer of the University with regard to confidentiality to the Board of Governors. The ombudsmen will maintain the confidentiality of any confidential materials to which they have access.

68. The ombudsmen will issue yearly a public report indicating the nature and extent of their operations, while protecting the anonymity and confidence of any individuals.

PART V

Supervisory Board

69. The supervisory board will be concerned with all aspects of the University Code.

70. There will be seven members appointed by the Board of Governors; two representatives each of the students, faculty, and staff, with the delegate of the Rector serving as chairman. The student members will be nominated jointly by the student associations, the faculty members by CUFA, and the staff members by the Rector's Cabinet in consultation with CUNASA.

71. Appointments will be for one year, and will be renewable.

72. The board will review the reports of both the Code Administrator and the ombudsmen, and make any recommendations it judges appropriate to the Rector, including recommendations for amendment to the code.

73. The supervisory board will be especially concerned with the equity of the sanctions applied to different individuals or categories of individuals.

74. A member of the University community may apply to the board to review the operation of any aspect of the code. In such instances, the function of the board will be to ensure that the procedures have been properly followed, including the way in which paragraph 20 of the section on Administration of the Code has been applied by the Code Administrator.

75. Three members of the board may require at any time that the board meet to review any aspect of the implementation of the code.

19 Student Associations

19.1 UNDERGRADUATE STUDENTS

19.2 GRADUATE STUDENTS

19.3 ALUMNI

19 Student Associations

19.1 Undergraduate Students

The **Concordia University Students Association (CUSA)** represents the undergraduate students, both full-time and part-time. Besides itself organizing a considerable number of events and activities, CUSA ensures student representation on the University decision-making bodies, both those that legislate on academic matters and those concerned with the cultural and social life of the community. There are student members of the Board of Governors, Senate and the various Faculty Councils, and of course of the Concordia Council on Student Life, which is directly concerned with the provision of student services.

Powers and responsibilities are divided between three bodies: the Executive, the Legislative Council, and the Judicial Board. The Executive is headed by two elected co-Presidents. The Legislative Council consists of the elected representatives of the four Faculties. The Judicial Board is an appointed body charged with assuring the constitutionality of any new legislation.

There are over 75 member clubs and associations. They may be associated with a department or discipline like the Psychology Students Association or pursue a special interest like the Debating Society. Each has its own programme of activities, which receives funding from CUSA. In addition there is a number of clubs and associations for students of particular ethnic backgrounds.

Other activities that come under the CUSA umbrella are two student newspapers, *The Link* and the *Concordian*, television station *CUTV* and radio stations *CIRL* and *CRSG*, and the Concordia Winter Carnival.

There is a CUSA office on each campus. The Sir George Williams office is in Room H-639 of the Hall Building (848-7474). The Loyola office is in Room 305 of the Centennial Building, 6931 Sherbrooke St. W. (848-7470).

19.2 Graduate Students

Graduate students become members of the Graduate Students Association (GSA). It is concerned with graduate student representation on the decision-making bodies and initiates a wide range of activities for graduate students and the University community as a whole, including social occasions, lectures and concerts. The association publishes a regular newsletter. Its offices are at 2160 Bishop Street.

19.3 Alumni

The **Concordia University Alumni Association** was created in 1983. In the words of its new constitution it is designed to "encourage the fellowship of graduates from Loyola, Sir George Williams, and Concordia University through social, educational and cultural activities", and to "preserve and promote the interests of Concordia University through Alumni involvement in its future and governance".

All graduates of the University are automatically members of the Association, as are graduates of Loyola College and Sir George Williams University. Full- and part-time students who have attended the University, and who have successfully completed a full academic year or its equivalent, can also become members.

The affairs of the Association are conducted by a 30-member Board of Directors of whom ten are graduates of Concordia and ten each of Sir George Williams and Loyola.

The Concordia University Alumni Association sponsors a variety of activities for its members in the Montreal area. Active graduates, those who contribute annually to the University, are eligible for membership in the Faculty Club, and receive favourable rates for group benefits in life insurance, athletic clubs, etc. Also, active members are eligible for continued library privileges at no additional cost.

Chapters are now being formed in most large urban centres in Canada as well as in some other countries. Members in these areas will be invited to special activities at least twice a year.

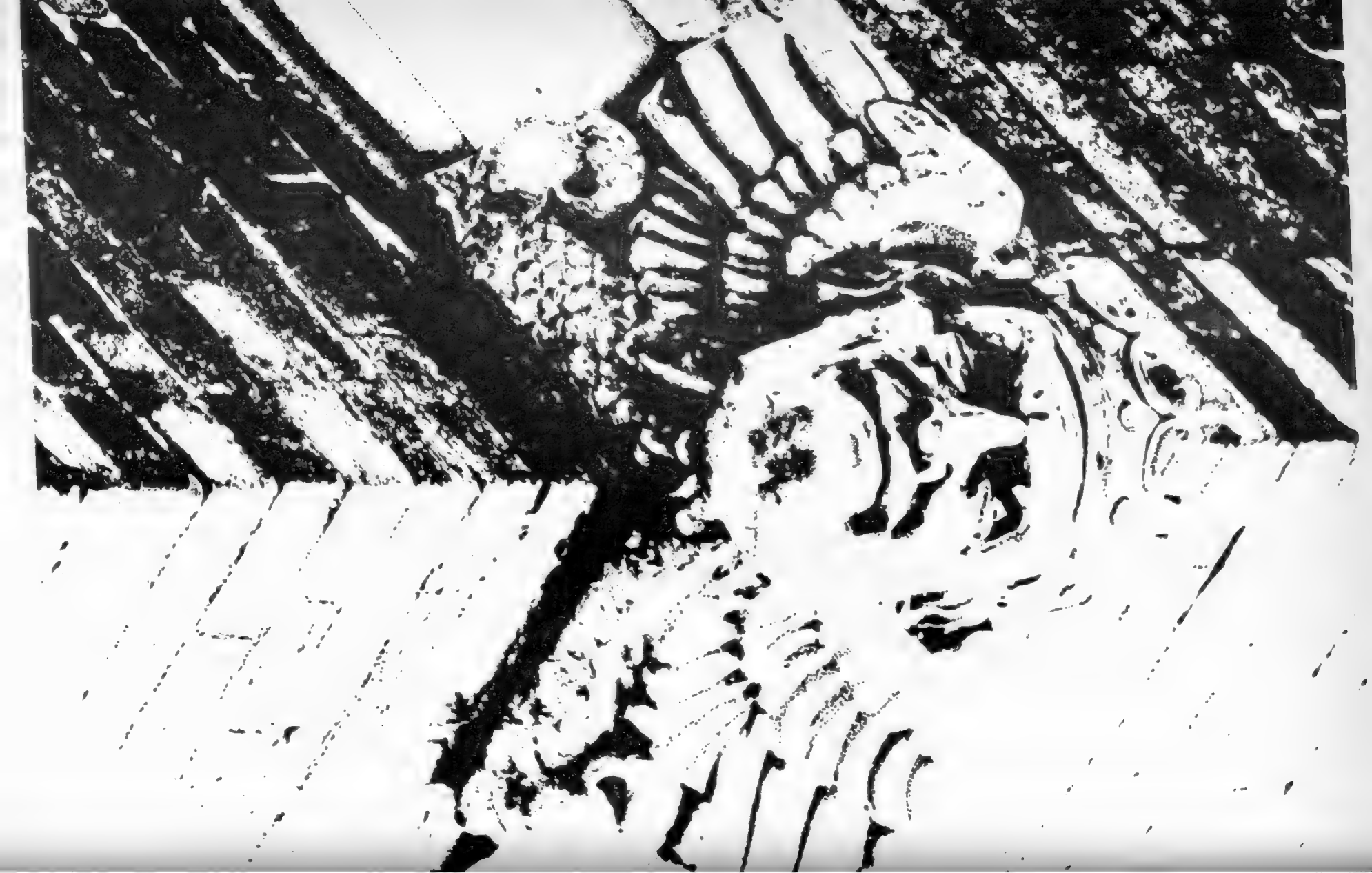
More details about the Concordia University Alumni Association can be obtained from either of the two offices listed below.

Loyola Campus
Administration Building
7141 Sherbrooke Street West
Tel: 848-3823

Sir George Williams Campus
2150 Bishop Street
Tel: 848-3818

Association of Alumni Sir George Williams, and Loyola Alumni Association Inc.

Graduates of Loyola College and Sir George Williams University are also members of their respective Alumni Associations. Both offer a full range of programmes, functioning as branches of the Concordia Alumni Association. Pre-1975 graduates who identify closely with their alma mater thus are able to maintain their established ties.



20 Centre for Continuing Education

20.1 CERTIFICATE PROGRAMMES IN BUSINESS AND ADMINISTRATION

20.2 CONTINUING EDUCATION LANGUAGE INSTITUTE

20.3 APPLIED ARTS

20.4 EDUCATIONAL TRAVEL PROGRAMME

20.5 SEMINARS AND WORKSHOPS

20 Centre for Continuing Education

Director
D. POTVIN
Tel: 848-3601

Assistant Director and Coordinator of Applied Arts Section
D. BATES
Tel: 848-3603

Administrator of Business and Administration Section
D. SECORD
Tel: 848-3604

Coordinator of Computer Institute
D. SECORD
Tel: 848-3604

Assistant to Coordinator
P. HAMILTON
Tel: 848-3606

Administrator of the Language Institute
G. CHERRIER
Tel: 848-3607

Office of the Centre
1822 de Maisonneuve Blvd. West

As part of its commitment to the life-long pursuit of education, Concordia University, through its Centre for Continuing Education, sets out to meet the learning needs and interests of the vast number of adult learners who seek educational activities outside the regular degree or certificate programmes of the University. Courses offered by the Centre are designated as "non-credit", but only in the sense that they may not be counted towards any of the degree or certificate programmes offered by the Faculties of the University.

Most of the Centre's courses are part of practical programmes leading to certificates of achievement awarded by the Centre to those who successfully complete the required work. A wide variety of such programmes and courses is offered, and these are reviewed and supplemented on a regular basis to ensure that they satisfy the changing needs of the community.

20.1 CERTIFICATE PROGRAMMES IN BUSINESS AND ADMINISTRATION

Communications Programme: The Centre for Continuing Education offers six Certificate Programmes in the field of Communications. All courses are taught by practitioners who work in the media or related fields. Six courses must be successfully completed to qualify for the Certificate in the following programmes: Journalism, Advertising, Public Relations, Graphics and Specialized Writing. Ten courses must be successfully completed to qualify for the Certificate in Radio and Television Production.

Hospitality Management Programme: This practical programme is available to individuals who wish to receive training in the special skills required to manage hotels, restaurants, and institutional and commissary food-service establishments. Each course is made up of 12 weekly two-hour classroom sessions given in the evenings. Ten courses must be successfully completed to obtain the Certificate of Hospitality Management.

Management Practices Programme: This series of courses in management and administrative subjects is offered to individuals who wish to expand their knowledge in selected business fields. Each course is made up of 10 weekly two-hour classroom sessions which are given in the evenings. Ten of the courses must be successfully completed to obtain the Certificate in Management Practices.

Purchasing and Inventory Control: This programme is designed for individuals who are beginning or planning to begin a career in Purchasing and Inventory Control. A Certificate in Purchasing and Inventory Control will be awarded upon successful completion of ten courses.

Tourism Programme (Day or Evening Division): The Tourism Programme is designed to train individuals for work in travel agencies, airlines, travel departments and other enterprises connected with the tourism industry. The courses are available to individuals considering tourism as a career and to travel agency employees who are interested in up-grading their skills. Six courses must be successfully completed to obtain the Certificate in Tourism.

Security Administration Programme: This programme is open to individuals who wish to receive training for management positions in security operations at industrial sites, financial institutions,

retail shopping and recreational complexes, hotels, medical, educational and other public institutions. Courses are offered in the evenings. Each course is made up of 10 weekly two-hour classroom sessions. Seven courses must be successfully completed to obtain the Certificate in Security Administration.

Investment Management and Finance Programme: This practical programme offers individuals the opportunity to learn about investments and finance. It will help participants to assess value, to develop strategies and to make the right decisions in a variety of investment situations.

The programme is based on a flexible module system. Ten self-contained modules of four classroom hours each provide a comprehensive knowledge of investment and finance.

A participant may register for all modules, or for one or more modules. For those who complete the ten modules of the Core Section, and successfully pass the qualifying examination, the Centre for Continuing Education offers the Certificate in Portfolio and Investment Management.

Interest courses are also available.

20.2 CONTINUING EDUCATION LANGUAGE INSTITUTE

The Continuing Education Language Institute is a division of the Centre for Continuing Education established to meet the need for year-round language programmes in English and French. These non-credit courses are designed to meet the needs of students seeking language training for professional, social and academic purposes. Day, evening and Saturday courses are offered from September to April as well as during the Summer.

Students may choose one of several programmes ranging in intensity from four to twenty-four hours a week. Class size is limited to ensure maximum student/instructor contact.

Members of the staff of the Institute have specialist training and experience in second language teaching.

The English Language Programme

There are three distinct English language programmes offered on a regular year-round-basis - the Intensive, the Evening, and the Saturday programmes.

For students who meet the necessary requirements, writing workshops are offered.

The French Language Programme

Courses at all levels are offered in the French language and are designed with specific vocabulary and language skills that provide for real life situations. The aim is to have students develop a maximum confidence in the use of the French language in personal and professional situations.

For students who meet the necessary requirements, the following specific courses are offered:

- a course in written French
- a general business course for those who already possess a working knowledge of French.

Special Programmes

Special language courses in English and French can be created to suit the needs of individual groups. Sponsoring agencies should write directly to the Institute for further information.

20.3 APPLIED ARTS

Fashion Designing and Pattern Making: This programme is offered to train students in a professional manner for the garment industry. A certificate will be granted upon successful completion of all courses.

Each course is made up of 12 three-hour classroom sessions given once a week in the evening.

Apparel Management: This programme is offered to prepare students for production management in the apparel industry. A certificate in Apparel Management will be granted upon the successful completion of nine courses.

Each course is made up of 13 two-hour classroom sessions given once a week in the evening.

Practical Photography: This programme consists of six-week and twelve-week courses at various levels, ranging from the basics of camera operation or darkroom procedures to courses providing an opportunity for those with more experience to refine and expand their photographic skills and vision. In addition, week-end workshops on special topics will be offered throughout the session. The courses combine lectures with hands-on participation.

Visual Arts: The Visual Arts Programme offers interested students the opportunity to work with professional artists of the Montreal community in drawing, painting and life drawing. Each course is made up of 12 three-hour sessions given once a week in the evenings.

Museum Education in the Twentieth Century Galleries: These courses in museum research will use art objects located in the new Canadian Galleries at the Montreal Museum of Fine Arts for instructional purposes. Emphasis will be placed on two major artists, J.W. Morrice and Paul-Emile Borduas. The courses are tailored to those students who wish to become animators at the Museum as well as those interested in museum research.

Each course is made up of twelve two-hour sessions offered on Monday mornings.

These courses are also given in the French Language.

20.4 EDUCATIONAL TRAVEL WORKSHOPS

The Centre for Continuing Education, in cooperation with the academic departments of the University, organizes a number of travel programmes. Some of the courses, which are generally scheduled between May and August, are regular Concordia offerings under the academic direction of a faculty member, and carry academic credit. The physical and personnel resources of academic, business and social institutions in other countries enhance the academic and cultural components of the courses. Programmes have been established in Kassel, Germany; Arezzo, Italy; San José, Costa Rica; Platanos, Greece and à la Sorbonne, Paris. From time to time, other programmes may be offered in other countries.

20.5 SEMINARS AND WORKSHOPS

With the cooperation of an academic department or faculty these seminars and workshops are sponsored by the Centre for Continuing Education and are aimed at meeting the needs of the community in topics that are not normally a part of regular degree programmes.

20.6 CONTINUING EDUCATION COMPUTER INSTITUTE

Applications Programming (Day Division): The Centre for Continuing Education offers a Certificate in Applications Programming for individuals who want to develop computer programming skills. Extensive "hands-on" experience will be provided on the Centre's own computing facilities, in addition to regular classroom teaching. To qualify for the Certificate, students must complete three intensive full day courses; each course has a duration of 10 weeks with 25 hours of theoretical and practical work per week. Students who wish to take these courses on an independent basis will be given a letter of achievement upon successful completion.

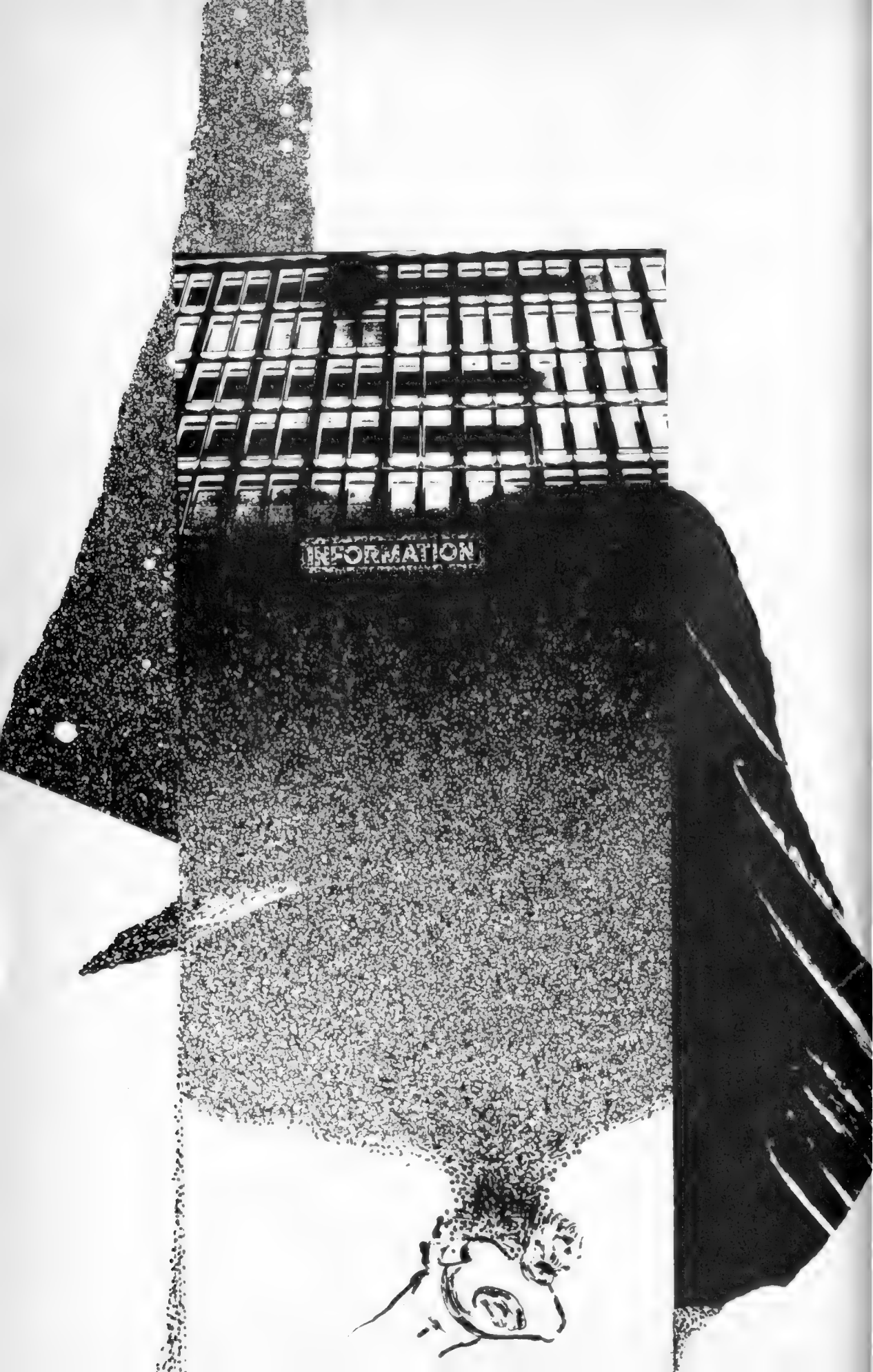
Automated Systems Security: This programme has been developed for individuals who *do not have computer skills*, but wish to train for functional security (stressing the physical aspects of security) in a computer environment. A Certificate in Automated Systems Security will be granted upon successful completion of six courses.

Data Processing for Business and Industry: This Continuing Education Programme leading to the Certificate in Data Processing for Business and Industry, is intended for individuals interested in the theoretical and practical aspects of the use of computers, and in their commercial applications. To qualify for the Certificate, students must successfully complete five compulsory courses, and any two of the elective courses.

Electronic Data Processing Security—Level I: This programme has been developed to provide security for an Electronic Data Processing environment from both internal and external sources. A Certificate in Electronic Data Processing Security will be granted to individuals who successfully complete the required eight courses.

Office Automation: The Centre for Continuing Education offers a Certificate Programme in Business Software Applications for students interested in acquiring the 'high-tech' skills needed in business and industry today. Students must successfully complete eight courses in order to obtain the Certificate. Students may take any course on an independent basis.

Word-Processing (Day Division): The Centre for Continuing Education offers a course in word-processing for individuals who want to develop word-processing skills. Students who wish to take this course will be given a letter of achievement upon successful completion.


INFORMATION

21 Off-Campus Education

INTRODUCTION

Concordia University offers credit courses off campus during the Regular (Fall/Winter) and Summer sessions. The courses are designed to be of interest to persons who find it inconvenient, for whatever reason, to attend classes on either campus. The University is prepared to offer courses wherever there is a sufficient demand, provided that qualified instructors are available. Off-campus courses have the same credit value as on-campus courses.

Last year, courses were given in Pointe Claire, Laval, and at various cultural centres (e.g. Saidye Bronfman Centre) throughout the Island of Montreal. Courses were offered from the Faculties of Arts and Science, Commerce and Administration and Fine Arts.

Persons interested in obtaining further information about programmes, or in having courses offered at a particular location, should contact the office of:

Off-Campus Education
7141 Sherbrooke St. W.
Montreal, Quebec, H4B 1R6
Tel: 848-3955/3956

The office is located at:

7141 Sherbrooke Street West
Room AD-420

REGISTRATION FOR OFF-CAMPUS CREDIT COURSES

It should be noted that registration in a course does not constitute admission to the University. While registration as an Independent student is possible, those registering for courses are encouraged to apply for admission to the University. To obtain information about registration for off-campus courses, call 848-3955/3956.

CONCORDIA

CONCORDIA

22 Teacher Training and Programmes of Interest to Teachers

22.1 CERTIFICATE PROGRAMMES

22.2 BACHELOR'S DEGREE PROGRAMMES

22.3 DIPLOMA PROGRAMMES

22.4 MASTER'S DEGREE PROGRAMMES

22.5 DOCTORAL PROGRAMMES

22.6 "BEYOND DEGREE (OR CERTIFICATE) REQUIREMENTS" NOTATION ON RECORD

22.7 CITIZENSHIP REQUIREMENTS

22.8 CERTIFICATION ASSISTANCE

22 Teacher Training and Programmes of Interest to Teachers

Coordinator of Teacher Training and Certification

J. Fiset
Tel: 848-3952

Mailing Address:
Concordia University
7141 Sherbrooke St. West
RC-203

Office Location:
7308 Sherbrooke St. West
Room RC-205

Concordia University is an approved centre for Teacher Training and Certification in the areas of Early Childhood Education, English as a Second Language and Fine Arts. This means that the Quebec Ministry of Education recognizes the programme and grants to the successful graduate a license to teach.

There are three types of programmes available at Concordia, initial certification, recertification and professional development. Students enrolled in initial certification programmes will, when they graduate, receive their first license to teach. These programmes are indicated in the following sections with a single asterisk (*). Recertification programmes are designed for individuals who have an initial teaching license and who wish to obtain certification in another area. Successful graduates receive an additional teaching license from the Ministry of Education. These programmes are identified with a double asterisk (**). Professional Development programmes are designed for teachers who wish to upgrade their qualifications in areas where a new teaching license is not granted.

In each of the above situations the programmes are recognized for teacher classification which is a process of relating a teacher's qualifications to the teacher's salary scale.

Because Concordia University does not have a faculty of Education, the courses and programmes for teachers are offered in various faculties. Potential students are advised to consult the specific academic departments for further information.

22.1 Certificate Programmes

1. Certificate in Art Education for Teachers (Elementary school level) (30 credits). See §81.50**
2. Certificate in Creative Drama and Theatre Arts, Elementary Option, Secondary Option (30 credits). See §81.140**
3. Certificate in Education (for practising teachers) (30 credits). See §31.090*
4. Certificate in Family Life Education (30 credits). See §31.010
5. Certificate in the History of Quebec (30 credits). See §31.160
6. Certificate in Judaic Studies (30 credits). See §31.270
7. Certificate in Library Studies (60 credits). See §31.190
8. Certificate in Mathematics for Teachers (Elementary School Level and Junior Secondary School Level) (30 credits). See §31.200
9. Certificate in the Teaching of English as a Second Language, Sequences I and II (30 credits). See §31.320**

Notes:
1. Certificate programmes are made up of undergraduate courses.
2. Most certificate programmes have very specific admission requirements. Students who wish to obtain a certificate are advised not to take the courses as Independent students unless they are sure that they are admissible to the programme.

22.2 Bachelor's Degree Programmes

1. Bachelor of Arts (Specialization in Early Childhood Education) (90 credits). See §31.090*
2. Bachelor of Education (Teaching of English as a Second Language) (90 credits). See §31.320*
3. Bachelor of Fine Arts (Specialization in Art Education) (90 credits). See §81.50

22.3 Diploma Programmes (See Graduate Calendar)

1. Diploma in Adult Education (30 credits).
2. Diploma in Advanced Music Performance Studies (30 credits).
3. Diploma in Art Education (30 credits).*
4. Diploma in Art Therapy (30 credits).
5. Diploma in Communication Studies (33 credits).

6. Diploma in Community Politics and the Law (33 credits).
7. Diploma in Computer Assisted Learning (30 credits).**
8. Diploma in Computer Science (33 credits).
9. Diploma in Early Childhood Education (33 credits).**
10. Diploma in Institutional Administration (33 credits).
11. Diploma in Instructional Technology (30 credits).
12. Diploma in Library Studies (33 credits).
13. Diploma in Sports Administration (33 credits).
14. Diploma in the Teaching of Mathematics (32 credits).
15. Diploma in Theological, Religious and Ethical Studies (33 credits).
16. Diploma in Writing/Translation (30 credits).

Note:
1. Diploma Programmes are made up of graduate courses.

22.4 Master's Degree Programmes (See Graduate Calendar)

1. Master of Arts in Applied Linguistics (45 credits).
2. Master of Arts in Art Education (45 credits).
3. Master of Arts in Art History (45 credits)
4. Master of Arts in Art Therapy (45 credits).
5. Master of Arts in Communication Studies (Media Studies) (45 credits).
6. Master of Arts in Educational Studies (45 credits).
7. Master of Arts in Educational Technology (90 credits).
8. Master of Arts in English (45 credits).
9. Master of Arts in Public Policy and Public Administration (Option A) (45 credits).
10. Master of Arts in Public Policy and Public Administration (Option B) (60 credits)
11. Master of Fine Arts (90 credits)
12. Master of Science in Biology (45 credits).
13. Master of Science in Chemistry (45 credits).
14. Master of Science in Physics (45 credits).
15. Master in the Teaching of Mathematics (M.T.M.) (45 credits).

22.5 Doctoral Programmes

1. Doctor of Philosophy, Art Education (90 credits).
2. Doctor of Philosophy, Educational Technology (90 credits).
3. Doctor of Philosophy, Humanities (90 credits).

**This is an initial programme of Teacher Training.*

***Graduates of this programme who fulfill the requirements of the Ministry of Education (M.E.Q.) will be entitled to a Specialist's Teaching Licence from the M.E.Q.*

22.6 "Beyond Degree (or Certificate) Requirements" Notation on Record

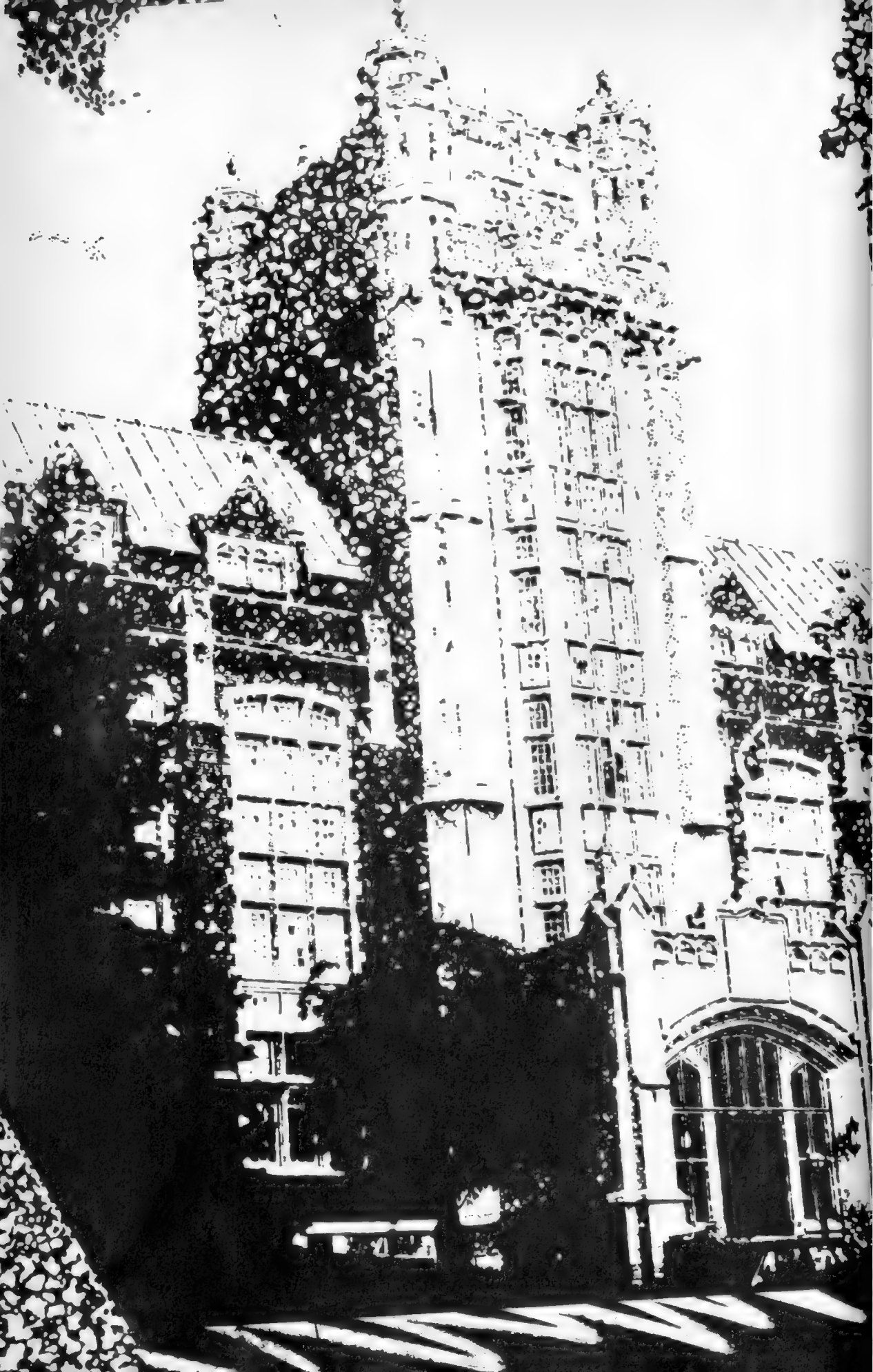
When a student so desires, courses previously completed and which were not counted towards his or her degree (or certificate) may be identified on the record as "Beyond Degree (or Certificate) Requirements".

22.7 Citizenship Requirements

Permanent certification in Quebec is only available for Canadian Citizens. Students who have landed immigrant status or who hold an appropriate work permit at the time of their graduation may be eligible for a temporary license to teach. Although students with a visa can complete teacher training programmes at Concordia University and receive a university degree, they are not eligible for certification.

22.8 Certification Assistance

Students who encounter difficulties with respect to certification or classification should contact the Coordinator of Teacher Training and Certification. Graduates of Concordia with certification problems should contact the Directeur, Service de la Certification des Maîtres, 955 chemin St-Louis, Sillery, Quebec, G1S 4S4.



31 Faculty of Arts and Science

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31.001 Faculty of Arts and Science

Dean
C.L. BERTRAND

Vice-Dean, Research, Space and Technical Services
P.J. ALBERT

Vice-Dean, Curriculum and Administrative Affairs
D.J. DICKS

Vice-Dean, Student Affairs
F.E. SHLOSSER

Vice-Dean, Academic Planning
G. VALASKAKIS

M. OSBORNE *(Secretary, Arts and Science Faculty Council)*

STRUCTURE

The Faculty of Arts and Science, comprised of the former Loyola Faculty of Arts and Science, the former Sir George Williams Faculty of Arts and the former Sir George Williams Faculty of Science, was brought into being on 1 July 1977.

For administrative purposes, the Faculty consists of departments, and programmes, centres, colleges, institutes and schools.

The departments and other units of which the Faculty is comprised are as follows:

Departments
Applied Social Science
Biology
Chemistry
Classics
Communication Studies
Economics
Education
English
Études Françaises
Exercise Science
Geography
Geology
Health Education
History
Journalism
Leisure Studies
Library Studies
Mathematics
Modern Languages and Linguistics
Philosophy
Physics
Political Science
Psychology
Religion
Sociology and Anthropology
Teaching of English as a Second Language
Theological Studies

Colleges
Centre for Co-Operative Education
Centre for Mature Students
Liberal Arts College
Lonergan University College
School of Community and Public Affairs
Science College
Simone de Beauvoir Institute

Programmes
Canadian Studies
Individually Structured Programme
Russian Studies
Science and Human Affairs
Urban Studies
Women's Studies

PRINCIPLES OF EDUCATION

The Faculty of Arts and Science is studying the programmes of instruction that it offers, and where appropriate is modifying them, with the objective of ensuring that all embody certain principles of education. These principles, seven in number, were deliberately enunciated by the Faculty in the academic year 1980-81 as follows:

1. The Faculty endorses the concept of specialization in university education and does so in the conviction that specialized and intensive knowledge in a particular discipline or field is necessary to the development of an educated person. While the programmes that this Faculty offers are many and various, and the capacities that they form are as different one from another as the students who pursue them, they should all help prepare graduates for living as informed individuals, fulfilling their role in society, not merely in the period when society remains more or less as it was when they were engaged in formal study but also in unpredictable future time. The skills and confidence derived from the experience of being led by the spirit of inquiry and of knowing what knowledge is, are part of the contribution of university education to the maintenance of an essential sense of self.

2. That part of any degree programme which is devoted to specialized study must be structured in such a way that it gives a coherent view of the particular discipline or field. It should be concerned not only to teach appropriate skills and items of knowledge but also to show students, explicitly and implicitly, the nature of the subject, its methods of study and the sort of questions to which it addresses itself at its more advanced levels. The programme should be structured to achieve these goals economically and efficiently.

3. The component of specialized study should not constitute the whole of any programme of concentration. A programme should not consist of study in one discipline only but require a minimum of study in some other discipline or disciplines. The desired effect of this requirement is to create a context for specialized study in which the strengths and also the limitations of the area of special study become more apparent.

4. The flexibility and mobility that many graduates require in the society they will enter derive in part from the skills and knowledge that they acquire in the university that go beyond the boundaries of their concentration programmes. Adaptability may be for many graduates a condition of success in their careers. The development of interests outside a single concentration can also enrich and sustain their personal lives. Hence, the total bachelor-degree programme should build upon and significantly extend the broad academic experience provided by the schools and colleges that students attend before entering university. In the context of our modern society this necessitates exposure to both the scientific method and humanistic approaches.

5. University education is concerned not only with the transmission of culture, but also with its extension, criticism and evaluation. All of these processes rely on mastery of communication. Ability to express oneself in writing (and in speech) should be fostered in all courses and degree programmes. Further, graduates will increasingly need to be familiar with, and to use, modern methods of communication. Programmes should develop an awareness of the impact of advances in communications and computer technology on the learning, work, and leisure environments.

6. Education must foster intellectual independence in a free and open spirit so that students may develop their critical faculties to their fullest. Degree programmes should never be so structured as to preclude the student's free choice of concentration and of options within their concentration or outside of it.

To assist students in making reasoned choices, the university should provide an advising structure which respects and accommodates decisions made by students about their programmes.

7. A degree programme need not realize all the *desiderata* implied in the foregoing; it must not, however, restrict itself to only one. A programme should have as objective the realization of a set of "local maxima", each corresponding to one of the principles, rather than the attainment of one "absolute maximum" corresponding to only one of the principles. For this reason, and because each programme has special constraints, compromise is inevitable. What matters is that some of the qualities of sound, contemporary education as articulated here be inherent in each programme, and that it be upon their inclusion that the absence of others be justified.

31.002 Programmes and Admission Requirements

General admission requirements are listed in §13.

1. Specific requirements for admission to the various programmes leading to the degrees of Bachelor of Arts, Bachelor of Education, and Bachelor of Science, and to certificates, are set out in the first column of the following listings. They refer to the table of CEGEP pre-Arts and pre-Science profiles defined below. Students lacking one or more of these prerequisites may be admitted, but must include the designated prerequisites among the courses followed prior to entry into the second year of their undergraduate programme. In certain cases, the prerequisites must be taken in addition to the undergraduate programme.

Profile	Requirements
0.00	Diploma of Collegial Studies
.34	To be a Registered Nurse, with authorization to practise and at least one year's experience
.72	DEC or equivalent and appropriate teaching licence.
1.4	Mathematics 103, 203 Physics 101, 201, 301; or 102, 202, 302 Chemistry 101, 201 Biology 301 or 921
10.1	Mathematics 337; or 103, 307 Biology 301, 401; or 921 Psychology 102
10.2	Mathematics 103, 307
10.3	Mathematics 337
10.5	To have reached in the language that will be studied a level equivalent to that of 2 CEGEP courses. If these courses have not been available in the CEGEP attended, the University may make up for them.
10.9	Mathematics 103, 203 Physics 101, 201, 301-78 Chemistry 101, 201 Biology 301
10.10	Mathematics 103, 203, 105 Physics 101, 201, 301-78 Chemistry 101, 201 Biology 301
10.12	Mathematics 103, 105, 203
A:	Interview
C:	Knowledge of English
D:	Knowledge of French

K: Submission of a portfolio of representative work

N: Placement test

Q: Competency in written and oral English, to be determined by a proficiency test, the results of which may lead to the rejection of the candidate or the requirement of additional university courses.

X: No specific requirements, but students should be prepared for entry into the disciplines of main interest. (This code does not appear in 'Accueil '83' and is one invented by the University.)

Programme titles refer to honours, specializations, majors, and minor components where these exist. Full information about the programmes offered under each title (including combinations with programmes in other disciplines) is to be found in the section of the calendar specified in the third column below. Certificate programmes, indexed in the same way, are listed in the last section, after those devoted to the programmes that lead to degrees in Arts, Science, and Education.

BACHELOR OF ARTS, BACHELOR OF SCIENCE, BACHELOR OF EDUCATION

Profile	Programme	Calendar Section
0.00	Adult Education	31.090
	Andragogy (see Education: Adult Education)	
	Animal Biology (See Biology)	
0.00	Anthropology	31.310
0.00	Anthropology and Sociology	31.310
	Applied Mathematics (see Mathematics)	
0.00	Applied Social Science	31.010
0.00	Athletic Training	31.120
10.9	Biochemistry	31.050
10.9	Biochemistry (with Medicinal Chemistry Component)	31.050
10.9	Biology	31.030
	Biology (Certificate in Scientific Measurement Biology option, see Physics)	
	Botany (see Biology)	
0.00A,K,Q	Broadcast Journalism	31.070, 31.180
0.00	Canadian Studies	31.040
	Cell and Molecular Biology (see Biology)	
10.9	Chemistry	31.050
10.9	Chemistry (Analytical)	31.050
	Chemistry (Certificate in Scientific Measurement Chemistry option, see Physics)	
0.00	Child Studies	31.090
	Classical Philology (see Classics)	
0.00	Classics	31.060
0.00A,K	Communication Studies	31.070
0.00A,K,Q	Communication and Journalism	31.070, 31.180
.34	Community Nursing	31.150
0.00	Community Service	31.150
0.00K	Creative Writing (see English, Creative Writing)	31.100
0.00A	Early Childhood Education	31.090
	Ecology (see Biology)	
0.00	Economics	31.080
0.00	Education	31.090
0.00	Education: Adult Education	31.090
	Education (see Child Studies; Early Childhood Education; Teaching of English as a Second Language)	
0.00	Education and Philosophy	31.090, 31.220
0.00	English	31.100
0.00K	English: Creative Writing	31.100
0.00	English Dramatic Literature	31.100
0.00	English and French	31.100, 31.110
0.00	English and History	31.100, 31.160
0.00	English Language	31.100
0.00	English Literature	31.100
10.5	English and Modern Languages	31.100, 31.210
0.00	English and Philosophy	31.100, 31.220
0.00	English and Religion	31.100, 31.270
10.9	Exercise Science	31.120
10.9	Exercise Science (Sports Science Option, Therapeutic Activity Option, Pre-Research Option, Bio-Chemistry Option)	31.120

Profile	Programme	Calendar Section
0.00	Family Life Education	31.010
0.00	French	31.110
0.00	French and English	31.100, 31.110
0.00	French/English Translation	31.110
0.00	French and History	31.110, 31.160
0.00	French Language	31.110
0.00	French Literature (Quebec)	31.110
0.00	French Literature	31.110
10.5	French and Modern Languages	31.110, 31.210
0.00	Geography (BA)—all options	31.130
10.9	Geography (BSc)—all options	31.130
0.00	Geography—Human (includes Cultural, Economic, Historical, Urban)	31.130
0.00	Geography—Man-Environment Relationships	31.130
0.00	Geography—Physical	31.130
10.9	Geology	31.140
10.9	Geology/Physics	31.140
10.9	Geology/Chemistry	31.140
10.9	Geology—Ecology Option	31.140
10.5	German	31.210
	Greek (Ancient—see Classics)	
0.00	Health Education	31.150
10.5	Hebrew	31.210
0.00	History	31.160
0.00	History (Certificate in the History of Québec)	31.160
0.00	History and English	31.160, 31.100
0.00	History and French	31.160, 31.110
0.00	History and Philosophy	31.160, 31.220
	History and Religion (see Religion and History)	
Appropriate	Interdisciplinary Studies—Self-Elected Specialization	31.170
10.5	Italian	31.210
0.00A,Q	Journalism	31.180
0.00	Judaic Studies	31.270
	Latin (see Classics)	
0.00	Language and Translation (French and English)	31.110
10.1	Leisure Studies	31.185
0.00	Library Studies	31.190
0.00	Linguistics	31.210
10.12	Mathematics (BA)	31.200
10.10	Mathematics (BSc)	31.200
10.12	Mathematics (Actuarial—BA)	31.200
10.10	Mathematics (Actuarial—BSc)	31.200
10.12	Mathematics (Applied—BA)	31.200
10.10	Mathematics (Applied—BSc)	31.200
0.00	Mathematics (Minor for Arts Students)	31.200
10.5	Modern Languages, one of the, and English	31.210, 31.100
10.5	Modern Languages, one of the, and French	31.210, 31.110
0.00	Outdoor Education	31.120
0.00	Philosophy	31.220
0.00	Philosophy and Education	31.220, 31.090
0.00	Philosophy and English	31.220, 31.100
0.00	Philosophy and History	31.220, 31.160
0.00	Philosophy and Religion	31.220, 31.270
0.00	Philosophy and Sociology	31.220, 31.310
10.10	Physics	31.230
	Physics (Theoretical and Experimental options—see Physics)	
10.10	Physics (Certificate in Scientific Measurement—Biology, Chemistry and Physics Options)	31.230
10.10	Physics/Marketing	31.230
0.00	Political Philosophy	31.220
0.00	Political Science	31.240
10.1	Psychology (BA)	31.250
10.9	Psychology (BSc)	31.250
10.9	Psychology (Psychobiology Option)	31.250
0.00	Religion	31.270
	Religion—Judaic Studies (see Judaic Studies)	
0.00	Religion and English	31.270, 31.100
0.00	Religion and History	31.270, 31.160
0.00	Religion and Philosophy	31.270, 31.220

0.00	Religion and Sociology	31.270, 31.310
10.9	Resource Analysis and Land Use	31.140
10.5	Russian	31.210
0.00	Russian Studies	31.280
0.00	Science and Human Affairs	31.300
10.10	Scientific Measurement (Biology Option, Chemistry Option, Physics Option)	31.230
Appropriate	Self-Elected Specialization Programme	31.170
0.00	Sociology	31.310
0.00	Sociology and Anthropology	31.310
0.00	Sociology and Philosophy	31.310, 31.220
0.00	Sociology and Religion	31.310, 31.270
10.5	Spanish	31.210
10.12	Statistics (BA)	31.200
10.10	Statistics (BSc)	31.200
0.00	Teaching of English as a Second Language (Elementary, Secondary, and Adult options)	31.320
0.00	Teaching of French as a Second Language to Adults	31.110
0.00	Theological Studies	31.330
0.00	Urban Studies	31.340
0.00A	Western Society and Culture	31.520
0.00	Women's Studies	31.560
	Zoology (see Biology)	

NOTE: *The Calendar Sections listed in the third column contain details, where applicable, of professional qualifications required for admission.*

2. Mature entrants are advised to consult §14 of this calendar, and in particular 14.3.1.

3. Students admitted to BA and BEd Extended Credit Programmes are required to complete 120 credits for the degree (i.e., 30 additional credits) and must include the following 30 credits in the 120:

- 6 credits in English (language or Literature)
- 24 elective credits, of which a maximum of 12 may be outside the Faculty of Arts and Science. Certain departments in the Faculty have specific requirements. Students intending to follow programmes of concentration within these departments must include the specified components as part of their programme.

BA Geography (Physical): 6 credits in Mathematics

BA Mathematics: 9 credits in Mathematics - C203[3], C204[3], C205[3]*

**Students not having MATH C202[3], or the equivalent must take it in place of one of their elective courses.*

BA Psychology: 3 credits in Mathematics
3 credits in Biology
6 credits in Psychology

Students admitted to BSc Extended Credit Programmes are required to complete 120 credits for the BSc degree (i.e., 30 additional credits) and must include the following 30 credits in the 120:

- 6 credits in Chemistry C205[3], C206[3]
- 6 credits in Mathematics C203[3], C205[3]*
- 12 credits in Physics C204[3], C205[3], C206[3], C224[1], C225[1], C226[1]
- 3 credits in Biology C201[3]
- 3 credits in Mathematics C204[3] for students intending to enter programmes of concentration in Mathematics or Physics;**
  or electives for all other students

**Students not having MATH C201[3], or the equivalent, must take it in place of one of their elective courses.*

***Students not having MATH C202[3], or the equivalent, must take it in place of one of their elective courses.*

NOTE: Students in the BA, BEd or BSc Extended Credit Programme may not count towards their programmes of concentration courses taken as part of the first 30 credits.

31.003 Degree Requirements

Up to and including the academic year 1973-74, degree programmes were expressed in terms of courses, with one credit being applied to a "full course" (normally, one extending over two terms) and one half-credit being applied to a "half-course" (which was normally completed in one term).

In 1974-75, in accordance with the recommendations of the Council of Universities of Quebec, the credit base was modified to take into account the total activity of the student. A student preparing for the degree of Bachelor of Arts, Bachelor of Education, or Bachelor of Science takes a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours spread across lectures, conferences, tutorials, laboratories, studio or practice periods, tests, examinations, and personal work.

Since the CEGEP programmes are designed to give all students the opportunity to explore different fields and thus acquire a broad

general basis for further study, the undergraduate programmes in the Faculty of Arts and Science require of students some degree of concentration in specific areas. Detailed statements about these programmes are made under the appropriate disciplinary headings in the sections of the calendar that follow this general account of degree requirements. They represent four main forms of concentration: the *Minor*, the *Major*, the *Specialization*, and *Honours*; and a fifth form, the *Certificate*. The University's formal definitions of these kinds of programmes are set out in section 16.2; for the convenience of students in Arts and Science, those definitions as they are construed in the Faculty are briefly repeated below.

The *Minor* is a programme consisting of a *minimum* of 24 credits in a single discipline and professing to give a basic introduction to the methodology and key concepts of that discipline. A Minor cannot in and by itself provide the concentration required of a candidate for a degree and is therefore always taken in combination with another programme.

The *Major* consists of a *minimum* of 36 credits taken in an approved sequence of courses. Normally within a major programme not more than 36 credits are required from a single discipline or department. In certain programmes, however, additional credits are required in cognate disciplines and departments. The major provides a solid grounding in the academic knowledge comprehended within the field of concentration. To enter and remain in it, a student normally does not have to meet a special performance requirement; see, however, programmes in Leisure Studies §131.185, Library Studies §31.190 and Western Society and Culture §31.520.

The *Specialization* consists of a *minimum* of 60 credits, normally not more than 54 credits of which are mandated from a single discipline or department. Like an honours programme, it provides a compehensive education in the field of concentration, but to enter and remain in it, a student normally does not have to meet a special performance requirement (see, however, programmes in Early Childhood Education §31.090, French/English Translation §31.110, Interdisciplinary Studies: Individually Structured Programme §31.170, Leisure Studies §31.185, and the Centre for Co-Operative Education §31.510). Students interested in subsequent "classification" by the Provincial government may be advised to follow a Specialization or an Honours programme.

The *Honours* programme consists of a *minimum* of 60 credits taken in an approved sequence of courses. Normally within an honours programme not more than 60 credits are mandated from a single discipline or department. Additional credits may be required in cognate disciplines and departments. Superior academic performance is required for admission to and continuation in the honours programme, the precise level of such performance being determined by Senate. See §16.2.4 and *Faculty Honours Regulations* set out below for matters governing Honours programmes at Concordia. An Honours degree or equivalent, because it testifies to a student's comprehensive education in a particular field, intellectual commitment to that field, and achievement of a high level of academic performance, has traditionally been required of entrants to postgraduate programmes.

Graduation requirements

1. A candidate for graduation must have successfully completed a programme of concentration in the form of an *Honours, Specialization* or *Major* programme.

2. A candidate for graduation must have successfully completed at least 24 credits outside the single discipline or department from which the degree concentration has been chosen. Within every block of 30 credits taken towards the degree, a student will normally choose no more than 24 credits from any one discipline or department.

3. A candidate for graduation must have successfully completed at least 18 credits from courses in Arts and Science in every block of 30 credits taken towards the degree.

4. A candidate for the degree of Bachelor of Arts must have qualified for admission to, and successfully completed, a programme leading to that degree. Specific admission requirements, expressed as CEGEP pre-Arts profiles, are given in §31.002. Students wishing to transfer out of one degree programme into another must satisfy the admission requirements of the programme they seek to enter.

5. A candidate for the degree of Bachelor of Science must have qualified for admission to, and successfully completed, a programme leading to that degree. Specific admission requirements, expressed as CEGEP pre-Science profiles, are given in §31.002. Students wishing to transfer out of one degree programme into another must satisfy the admission requirements of the programme they seek to enter.

6. A candidate for the degree of Bachelor of Education must have qualified for admission to, and successfully completed, the programme leading to that degree. The admission and degree requirements are set out in §31.320.

7. In general, the credits obtained for any course may not be used to satisfy the requirements of more than one programme. Students first registered in certain Certificate programmes may however apply credits obtained towards the Certificate to a degree programme.

8. Those students entering the University after September 1, 1978 as *Independent students* will be permitted to apply *no more* than 30 credits obtained as an Independent student towards any Arts and Science Faculty degree programme.

Supplemental Examinations
(Arts and Science)

Supplemental examinations shall be offered only where, as a condition for passing the course, it is required that a student pass the final examination regardless of its weighting; or where the final examination contributes 50% or more of the final grade.

A student failing a course which comprises entirely, or in part, a laboratory or similar practicum, may not be eligible to write a supplemental examination.

All courses which a student fails and for which there is no supplemental examination shall be graded FNS or R.

A failed student (see §16.3.5) may not write supplemental examinations.

Honours Programmes

The Faculty of Arts and Science has programmes leading to an Honours degree in certain selected fields. To enter an Honours programme, students apply to the Departmental Honours Committee (Adviser). The Departmental Honours Committee (Adviser) will accept students into Honours, subject to review by the Faculty Honours Committee. The Departmental Honours Committee (Adviser) will not normally accept students until they have obtained 30 credits at this University; students requiring fewer than 30 credits to graduate will not normally be accepted. The department will notify the Faculty Honours Committee of the acceptance. The Faculty Honours Committee will review the departmental acceptance and notify the department, the student, and the Records Office of the acceptance. In those cases where the Faculty Committee reverses a department's acceptance of a student into Honours, the department may appeal the Faculty Committee's ruling to the Arts and Science Faculty Council.

Honours Regulations (Faculty Regulations)
See also §16.2.4

In order to qualify for an Honours degree, a student must comply with the regulations set forth below.

1. An Honours student must meet the general degree requirements, as well as the specific requirements for an Honours degree. A student must complete a minimum of 30 credits in the courses from the Honours component of the programme at this University to receive a degree with Honours. In certain cases, these 30 credits may include some specific courses for which pro-tanto credit may not be awarded.

2. An Honours student must maintain an average of 'B', or 75%, in all courses in the Honours component of the programme; the minimum acceptable grade in any one of these courses is 'C', or 65%.

3. An Honours student must have a minimum average of 'B-', or 71%, over courses in the Honours component of the programme taken in each academic year. For part-time students, this will be calculated in eighteen-credit blocks.

4. In the courses outside the Honours component of the degree programme, an Honours student must have an average of no less than 'C', or 65%; the minimum acceptable grade in these courses is 'D', or 55%.

5. Students who are required to withdraw from the Honours programme may proceed in the corresponding Specialization or Major programme. Reinstatement in the Honours programme is possible only by appeal to the Faculty Honours Committee.

6. A student is allowed to qualify for only one Honours degree in either a single or combined Honours programme. A student may qualify for a Minor or Major programme in addition to an Honours programme. In general, the credits obtained for a particular course may be used to satisfy the requirements of only one programme.

Students may appeal their department's determination of their status or interpretation of requirements in the Honours programme. Such appeals should be addressed to the Chairman of the Faculty Honours Committee.

The Faculty Honours Committee receives and reviews departmental recommendations for acceptance into Honours programmes and graduation with Honours, and adjudicates disputes between students and departments concerning Honours programmes. Since the Faculty Honours Committee cannot hear appeals contesting its own judgements, students and departments who wish to appeal a decision of the Faculty Honours Committee should address this appeal to the Chairman of the Arts and Science Faculty Council.

These new regulations will apply to those students entering Honours programmes as of June 1, 1979. Students already in an Honours programme may continue under the old regulations established prior to June 1, 1979.

General Certificate in Arts and Science

The General Certificate in Arts and Science is intended primarily for part-time students who qualify for admission to first-cycle programmes, but who, at the time of registration, have not yet determined which programme would best serve their interests. In particular, it is designed to meet the needs of mature students who are unwilling or unable to make the long-term commitment involved in a regular or extended degree programme.

The Certificate requires successful completion of 30 credits. At least 24 of these credits must be chosen from courses offered by not more than three departments in the Faculty of Arts and Science.

Credits earned in the Certificate may not be counted towards the additional credits required in extended programmes.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

The General Certificate Programme in Arts and Science was first offered in the session commencing September 1978.

31.004 Joint Programmes

Subject to approval of the departments concerned, students may take these or other specially designed programmes by being admitted to the Individually Structured Programme (see programme description and admission procedures in §31.170):

- BA Joint Honours in Education and Philosophy
- BA Joint Honours in English and History
- BA Joint Honours in English and one of the Modern Languages
- BA Joint Specialization in English and one of the Modern Languages
- BA Joint Honours in English and Philosophy
- BA Joint Honours in English and Religion
- BA Joint Honours in French and History
- BA Joint Honours in French and one of the Modern Languages
- BA Joint Honours in History and Philosophy
- BA Joint Honours in History and Religion
- BA Joint Honours in Philosophy and Religion
- BA Joint Honours in Philosophy and Sociology
- BA Joint Honours in Religion and Sociology

Students wishing to have further information about these programmes should consult the departments concerned.

31.010 Applied Social Science

Chairman
D. MARKIEWICZ, *Associate Professor, Applied Social Science and Psychology*

Professors
J.F. GAVIN
R.D. McDONALD

Associate Professors
S.I. CARTER
R. CAWLEY
R. KASS
M. TAYLOR

Adjunct Associate Professor
D. KELLEHER

Assistant Professor
K.B. CHAN

Adjunct Assistant Professor
L. LABELL

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

60 BA Specialization in Applied Social Science

NOTE: PSYCH C200[6] is a prerequisite for the Psychology courses included in this programme. Students not exempted from PSYC C200[6] must enrol in this course during their first year.
The Sociology courses included in this programme also have prerequisites (e.g., SOCI C203[3] which should be taken in their first year).

9 APSS C240[6], C250[3]
6 PSYC C310[3] and C315[3] taken concurrently
12 Chosen from APSS C420[6], C431[6], C440[6], C450[6]
6 APSS C490[6]
27 Chosen from Lists A, B, C, and D. At least six (6) credits and not more than twelve (12) credits must be chosen from APSS courses. At least six (6) credits must be chosen from List A and a further six (6) credits from one other List: B, C, or D.

List A: Social Theory
PSYC C333[6]*, SOCI C220[3], C300[6], C325[3], C330[6], C370[6]

List B: Understanding Individuals and Groups
APSS C413[6], C418[3], C419[3], C431[6], C450[6], C453[3], C456[3], C463[6]; ADED C344[3], C345[3]; PSYC C283[3], C284[3], C336[6]*, C379[3]*; SOCI C262[3], C263[3], C372[6]

List C: Understanding Communities
APSS C440[6], C461[6]; GEOG C313[6], C331[6]; SOCI C280[6], C353[3], C354[3], C382[3]; URBS C280[6]

List D: Understanding Organizations
APSS C420[6]; MANA C266[3], C340[3]; PSYC C375[6]*; SOCI C329[3], C429[3]

**PSYC C310[3], and C315[3] are prerequisites for these courses.*

42 BA Major in Applied Social Science

NOTE: PSYC C200[6] is a prerequisite for the Psychology courses included in this programme. Students not exempted from PSYC C200[6] must enrol in this course during their first year
The Sociology courses included in this programme also have prerequisites (e.g., SOCI C203[3]) which should be taken in their first year.

9 APSS C240[6], C250[3]
6 Chosen from APSS C420[6], C431[6], C440[6], C450[6]
3 APSS C415[3]
24 Chosen from Lists A, B, C, and D. At least six (6) credits and not more than 12 credits must be chosen from APSS courses. At least six (6) credits must be chosen from List A and a further six (6) credits from one other List: B, C, or D.

List A: Social Theory
PSYC C333[6]*, SOCI C220[3], C300[6], C325[3], C330[6], C370[6]

List B: Understanding Individuals and Groups
APSS C413[6], C418[3], C419[3], C431[6], C450[6], C453[3], C456[3], C463[6]; ADED C344[3], C345[3]; PSYC C283[3], C284[3], C336[6]*, C379[3]*; SOCI C262[3], C263[3], C372[6]

List C: Understanding Communities
APSS C440[6], C461[6]; GEOG C313[6], C331[6]; SOCI C280[6], C353[3], C354[3], C382[3]; URBS C280[6]

List D: Understanding Organizations
APSS C420[6]; MANA C266[3], C340[3]; PSYC C375[6]*; SOCI C329[3], C429[3]

**PSYC C310[3], and C315[3] are prerequisites for these courses.*

Certificate in Community Service

The Department of Applied Social Science offers a 30-credit programme consisting of 21 credits in the Department and 9 credits which complement these from other disciplines

leading to the Concordia University Certificate in Community Service. Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Admission Requirements

General Admission Requirements are listed in §13.

Students should be actively involved in community service, either as staff or as volunteers or members of boards, committees, or councils of community organizations and agencies.

30 Certificate in Community Service
(Courses must be taken in an approved sequence.)
Stage I
9 APSS C250[3], C461[6]
Stage II
9 Chosen from POLI C360[6]; PSYC C281[3], C394[6]; SOCI C230[3], C353[3], C354[5], C380[3], C450[6]; URBS C280[6], C379[3], C382[3]
6 APSS C420[6], C431[6], C440[6], C450[6]
6 Chosen from APSS C413[6], C418[3], C419[3], C463[6]

NOTE: Where required, students must take introductory courses when these are prerequisites for courses in the Certificate.

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the programme, chosen in consultation with the Coordinator of the Certificate Programme.

Certificate in Family Life Education

The Department of Applied Social Science offers a 30-credit programme consisting of 18 credits of applied courses and 12 credits of foundation courses chosen as electives, leading to the Concordia University Certificate in Family Life Education. Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Admission Requirements

General Admission Requirements are listed in §13.

Students should be actively involved in family life education through a sponsoring community agency or organization; or interested in becoming more effective family life educators.

30 Certificate in Family Life Education
(Courses must be taken in an approved sequence)
Stage I
6 APSS C250[3], C454[3]
Stage II
12 Chosen from EDUC 398[3]; PSYC C226[3], C227[3], C230[3], C231[3], C280[3], C281[3], C283[3], C284[3]; SOCI C262[3], C263[3], C272[6], C372[6], C373[3], 398[3]; RELI C333[3], C334[3], C370[6]
12 APSS C431[6], C453[3], C455[3]

NOTE: Where required, students must take introductory courses when these are prerequisites for courses in the Certificate.

NOTE: In the event that a student is awarded an exemption from a required course, it will be necessary for the student to replace that course with another relevant to the programme, chosen in consultation with the Coordinator of the Certificate programme.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

APSS C240 ***Interpersonal and Group Dynamics*** (6 credits)
This course is designed to foster development of understanding with respect to self, self in relation to others and patterns of relationships in small groups. This will involve skill-building in: relating and communicating with others; observation and diagnosis of relationships and group dynamics; problem-solving; decision-making; and intervention. The course will also include learning and application of interpersonal communication and group development theory. The course requires active participation, reflective assignments such as journal writing, and learning how to use theory to interpret observation and experience.
NOTE: Students who have received credit for APSS C355 and C356 may not take this course for credit.

APSS C250 ***Applied Social Science Approaches to Social Problems*** (3 credits)
This course focuses on two questions: What is a social problem? What is a social response? The exploration of these questions is field-based, supported by cases, research of the literature, and reflection on the issues there discovered. Students will be introduced to the concepts and processes of social systems and social intervention. Lectures and laboratories.
NOTE: Students who have received credit for APSS C212 may not take this course for credit.

APSS 298 ***Selected Topics in Applied Social Science*** (3 credits)
APSS 299 ***Selected Topics in Applied Social Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

APSS 398 ***Selected Topics in Applied Social Science*** (3 credits)
APSS 399 ***Selected Topics in Applied Social Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

APSS C413 ***Adolescent Behaviour in Urban Areas*** (6 credits)
Prerequisite: APSS C240; APSS C250; or permission of the Department. A survey of adolescent values, family and group relations, social mobility, friendship patterns, educational and vocational adjustment, with a focus on understanding social behaviour in urban communities. Attention will also be given to programmes attempting to enhance adolescent development and reduce social problems.

APSS C415 ***Personal Values and Social Problems*** (3 credits)
Prerequisite: Enrolment in the BA Major in APPS and completion of 60 credits in the degree programme. This course is designed as an integrative seminar for final-year students. It is intended to help students draw together their learning from a variety of disciplines and relate it to practical conditions of the social world. The course includes identification of personal strengths, interests, goals, and values related to social and community service.

APSS C418 ***Gerontology for the Practitioner I*** (3 credits)
This course provides an overview of the status and problems of the elderly in our society. Through interviews, visits, readings, and lecture-discussions, the course is designed to foster an understanding of some of the problems confronting the elderly. Attention is given to the resources available for the elderly as well as to approaches to the problems of the elderly that maximize their sense of responsibility.

APSS C419 ***Gerontology for the Practitioner II*** (3 credits)
Prerequisite: APSS C418. This course will focus in depth on one or two pivotal issues for the elderly in our society. In this course students will interview the elderly, visit community resources for the elderly, and develop approaches to the solutions for the problems identified.

APSS C420 ***Organizational Change and Development*** (6 credits)
Prerequisite: APSS C240; APSS C250; or permission of the Department. This course focuses on the leader who solves problems and makes decisions in conjunction with other people in community-serving organizations. The basic objective of this course is to increase knowledge and understanding of human behaviour in the not-for-profit organizations. The course will focus on: i) theory and research, ii) understanding of the processes of leadership and decision making, iii) behavioural skills in working with people, iv) understanding of oneself in relation to administrative responsibility. This course will rely heavily on active participation of class members.
NOTE: Students who have received credit for APSS C421 may not take this course for credit.

APSS C431 ***Leadership in Group Development*** (6 credits)
Prerequisite: APSS C240; APSS C250. This course is designed to provide students with an opportunity to increase their effectiveness in leading small groups; to identify their leadership styles and to adapt individual styles to a variety of situations. The course will focus on: factors helping and hindering group process; communication patterns; problem solving; handling conflicts and dealing with personal needs of members. Special attention will be given to tools for systematic observation, group diagnosis and group self-analysis techniques. Students will be required to study the development of an outside group through the year. Lectures, laboratories and fieldwork.

APSS C440 ***Community Development*** (6 credits)
Prerequisite: APSS C240; APSS C250; or permission of the Department. This course will have students working as volunteers in a community agency engaged in outreach work or community development. Class sessions will be designed for theoretical input on problems identified in students' field placement experience. Class sessions will include theory presentations, games and simulations, and problem solving. The emphasis will be on discovering what a social system is by observation and participation and finding out how to manage interventions in an appropriate fashion. Lectures and fieldwork.
NOTE: Students who have received credit for APSS C441 may not take this course for credit.

APSS C450 ***Principles and Practices of Counselling*** (6 credits)
Prerequisite: APSS C240; or permission of the Department. This course is designed to introduce students to the basic concepts of helping. Through theoretical and experiential approaches instruction will focus on basic concepts of relating to another person in a helping relationship and skill development in interviewing. Students will be briefly introduced to various counselling theories and approaches to clarify their own theoretical position in a helping relationship. This course is not designed to equip students to become professional counsellors, but to introduce them to the field and prepare them for future study and training. The course will include skill training, observation and demonstration exercises, role play, practice and discussion sessions, theory input and the use of films and video.

APSS C453 ***Sexuality and Human Relations*** (3 credits)
Prerequisite: APSS C240; or permission of the Department. Using a variety of small group processes, the seminar will explore physical and psychosocial factors in the emergence of the sexual self.

Objectives of the seminar include helping students to increase awareness of sexual values and attitudes. Lectures and laboratories.
NOTE: Students will receive no more than 6 credits from APSS C453 and HEAL C472.

APSS C454 ***Special Seminar in Family Communication*** (3 credits)
Prerequisite: This course is for Certificate students only; APSS C240; or permission of the Coordinator. A course in marriage and family living, including decision making, interpersonal relationships, communication, male-female lifestyle and problem solving within a family. Handling of crisis, loneliness, death, and dying will also be considered. The course studies marriage and family relationships in a way that can pertain directly to the student's own living experiences. Lectures and laboratories.

APSS C455 ***Advanced Integrative Seminar in Family Life Education*** (3 credits)
Prerequisite: This course is for Certificate students only; APSS C240; APSS C250; APSS C454; or permission of the Coordinator. The purpose of this course is to coordinate the other courses required by the programme and to integrate the theory derived from the contributing disciplines within an applied social science perspective. Lectures, laboratories and fieldwork.

APSS C456 ***Interviewing*** (3 credits)
Prerequisite: APSS C240; APSS C250; or permission of the Department. The course will review different forms of interviewing, communication influences on the interviewer and interviewee, structure and design features of interviews, construction of questions, building rapport, controlling information flow, and limitations of the approach. Illustrations of interviewing will be taken from the contexts of business, counselling, mass media, and research, among others. Approximately equal emphasis will be devoted to theoretical discussions and practice.

APSS C461 ***Human Services: Public Policy and Current Issues*** (6 credits)
A general course concerned with human services problems in modern society; some analysis of these problems in relation to economic and cultural patterns. A description of the functional settings in which human services are practised. A consideration of the methods used in human services, and some consideration of the links between human services and religion, law, medicine, nursing, teaching, and other professions.

APSS C463 ***Adulthood: Patterns and Transitions*** (6 credits)
Prerequisite: APSS C240; APSS C250; permission of the Department. The course addresses itself to the phenomenon of adult development from early adulthood through maturity. The focus is on both the content of the life changes observed, and on the process of change from one life stage or period to another. Participants will explore the patterns of change in their own lives and relate these patterns to contemporary theories of adult development. The relationship of life changes to cultural and historical features of the times, and to working in social systems as helping professionals will also be examined. Thus, autobiographical accounts of class participants, and existing research evidence describing normative life changes, reactions to these, and the nature of the change process will be integrated in the evaluation of relevant theory.

APSS C471 ***Special Projects Seminar*** (6 credits)
Prerequisite: Second-year standing in Specialization or Major in Applied Social Science and permission of the Department. A seminar course of field projects, surveys, and research studies undertaken by each student.

APSS C472 ***Special Projects Seminar*** (6 credits)
Prerequisite: Second-year standing in Specialization or Major in Applied Social Science and permission of the Department. Students who have received credit for APSS C471 may register for APSS C472 provided the subject matter is different.

APSS C487 ***Independent Study in Applied Social Science*** (3 credits)
Prerequisite: Permission of the Department. This course is intended for students who wish to continue a project initiated in another course in the Department. The instructor of that course must agree to supervise this independent study.

APSS C490 ***Approaches to Applied Social Research*** (6 credits)
Prerequisite: Enrolment in the BA Specialization in APSS and completion of 60 credits in the degree programme. This course is a project seminar which explores research approaches commonly used by social practitioners such as action research, survey-feedback studies, and programme evaluation. Each of the alternative modes of research relate directly to social and organizational change. Approaches of particular interest in this course are those which maximize involvement by people in directing their own change. The course includes a research project which utilizes an approach to applied social research of most interest to the student. Lectures and laboratories.
NOTE: Students who have received credit for APSS C400 may not take this course for credit.

APSS 498 ***Advanced Topics in Applied Social Science*** (3 credits)
APSS 499 ***Advanced Topics in Applied Social Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.030 Biology

Chairman
E.J. MALY, *Associate Professor*

Professors
H.E. ENESCO
R.K. IBRAHIM
E.B. NEWMAN

Associate Professors
P.J. ALBERT
P.D. ANDERSON
S.S. ASHTAKALA
C. BECKMAN
R.T. CRONIN, s.j.
K.S. DHINDSA
N.N. KAPOOR
G. LEDUC
R.L. LOWTHER
C.F. MACLEOD
B.S. MANGAT
J.D. McLAUGHLIN
R.M. ROY
S.M. RUBY
P. WIDDEN

Assistant Professors
D. FAIRBAIRN
M.B. HERRINGTON
J.A. KORNBLATT
R. STORMS

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Courses offered by the Biology Department are classified as follows:

A. ANIMAL BIOLOGY COURSES
BIOL C230, C231, C232, C233, C234, C235, C331, C332, C333, C334, C335, C336, C431, C433, C435, C436, C438, C439.

B. BOTANY COURSES
BIOL C240, C341, C342, C344, C345, C347, C348, C441.

C. ECOLOGY COURSES
BIOL C250, C351, C352, C353, C355, C356, C452, C454.

D. CELL AND MOLECULAR BIOLOGY COURSES
BIOL C220, C260, C270, C362, C363, C364, C365, C370, C460, C461, C462, C463, C464, C465, C467, C470.

E. BIOLOGY ELECTIVE COURSES
BIOL C222, C223, C242, 298, 299, C320, C321, C323, C380, C381, 398, 399, C420, C480, C481, C490, and any of the Animal Biology, Botany, Ecology, or Cell and Molecular Biology courses. Approved courses outside the Department may be taken for Biology elective credits.

NOTE: Advanced Topics courses (BIOL 498, BIOL 499) will be given from time to time and may be applied to the above areas, where appropriate. The area will be indicated in the title (i.e. Advanced Topics in Botany, ...; Advanced Topics in Ecology, ...). Please consult current Biology Course Guide or Departmental Adviser for information on Advanced Topics courses.

Although the Biology Department offers Honours, Specialization, Major and Minor programmes, we recommend that students wishing to pursue careers in Biology take either an Honours or Specialization programme. The Major and Minor programmes are not designed to provide an extensive enough background in Biology for students to progress to careers in the discipline. The Major should be considered by students requiring a less specialized degree, with a biology concentration or as part of a double major programme. The Minor is designed to be flexible and allow a student whose area of concentration is outside of Biology to take courses to provide either a general survey or to gain a more in depth understanding of one of the major areas of biology.

For those wishing to concentrate in a particular area, recommended sequences of courses are described in course guides available in the Biology Department. It is also strongly recommended that students taking any Biology programme take full advantage of the counselling available within the Department, in order to select the courses that will best meet their needs.

72 BSc Honours in Biology

An approved sequence of courses from the following selection constitutes an Honours in Biology. Students must consult with the Departmental Honours Adviser before registering for the Honours programme.

24 CHEM C221[3*] and C222[3*], C271[3]; BIOL C222[3], C240[3], C260[3], C490[6]
6 BIOL C333[6] or C348[6] or C364[3] and C464[3]
33 Selected from *A. Animal Biology courses, B. Botany courses, C. Ecology courses* and *D. Cell and Molecular Biology courses.*
9 BIOL electives

NOTE: A minimum of 3 credits must be completed from each of the four subject areas within the first 60 credits. A minimum of 21 credits in 300- and 400-level Biology courses must be completed, excluding BIOL C490.

**Students entering the programme with CEGEP Organic Chemistry must replace these credits with Biology electives.*

60 BSc Specialization in Biology

An approved sequence of courses from the following selection constitutes a Specialization in Biology.

18 CHEM C221[3]* and C222[3]*, C271[3]; BIOL C222[3], C240[3], C260[3]
6 BIOL C333[6] or C348[6] or C364[3] and C464[3]
27 Selected from *A. Animal Biology courses, B. Botany courses, C. Ecology courses, D. Cell and Molecular Biology courses.*
9 BIOL electives

NOTE: A minimum of 3 credits must be completed from each of the four subject areas within the first 60 credits. A minimum of 15 credits in 300- and 400-level Biology courses must be completed, excluding BIOL C490.

**Students entering the programme with CEGEP Organic Chemistry must replace these credits with Biology electives.*

36 BSc Major in Biology

An approved sequence of courses from the following selection constitutes a Major in Biology.

15 CHEM C221[3]* and C222[3]*, C271[3]; BIOL C240[3], C260[3]
3 Selected from BIOL C222[3], C333[6], C348[6], C362[3], C364[3], and C464[3]
12 Selected from *A. Animal Biology courses, B. Botany courses, C. Ecology courses, D. Cell and Molecular Biology courses.*
6 BIOL electives

NOTE: A minimum of 3 credits must be completed from each of the four subject areas within the first 60 credits. A minimum of 6 credits in 300- or 400-level Biology courses must be completed.

**Students entering the programme with CEGEP Organic Chemistry must replace these credits with Biology electives.*

24 Minor in Biology

12 Selected from *A. Animal Biology courses, B. Botany courses, C. Ecology courses, D. Cell and Molecular Biology courses.*
12 BIOL electives.

32 Certificate in Scientific Measurement (Biology Option)

12 BIOL C220[3], C222[3], C223[3], C230[3]
6 CHEM C311[2], C316[1], C392[3]
14 PHYS C295[2], C296[2], C396[5], C397[5]

78 BSc Specialization in Geology-Ecology

See Section 31.140, Geology

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

BIOL C200 ***Fundamentals of Human Biology*** (6 credits)
A series of lectures, demonstrations, and seminars to provide non-biologists with a general survey of the fundamental principles of life, with special emphasis on the structures and functions of human beings. Lectures only.
NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit.

BIOL C201 ***Introductory Biology*** (3 credits)
Fundamentals of plant and animal biology: basic physics and chemistry of life; cell and tissue structures and functions; anatomy and physiology of human systems; survey of plant and animal taxonomy, ecology, heredity and evolution. Lectures and laboratory.
NOTE: Students with CEGEP BIOL 301, or equivalent, may not take this course for credit. Students entering BIOL programmes without CEGEP BIOL 301, or equivalent, must take this course, but not for programme credit.

BIOL C203 ***Fundamental Nutrition*** (3 credits)
This course deals with food composition (carbohydrates, lipids, proteins, vitamins, and minerals), its absorption and utilization, energy balance, special diets, and food technology. Lectures only.
NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit.

BIOL C206 ***Elementary Genetics*** (3 credits)
A survey of classical and contemporary developments in the study of heredity, with particular attention to human examples. This course is open to the general student body. Lectures only.
NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit; may not be taken for credit with BIOL C205.

BIOL C207 ***Micro-Organisms and Man*** (3 credits)
A course designed for students registered in a programme other than one leading to the B.Sc. degree. It will consider the role of micro-organisms in plant and animal diseases, food spoilage, cellulose degradation, and water pollution, as well as their ecological, industrial, and pharmacological importance. Lectures only.
NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit.

BIOL C208 ***Environmental Biology I*** (3 credits)
This course examines the principles and concepts of ecosystems, the interaction of organisms and their environment. Energy flow and nutrient cycling in ecosystems, population dynamics, and community organization. Lectures only.
NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit.

BIOL C210 ***Genetics and Human Welfare*** (3 credits)
A course on the principles of heredity as understood by modern biology. It deals also with the application of genetic principles to organisms, including humans. The biological basis of social problems is dealt with at some length. Organic evolution and its implications for human life and welfare are considered. Lectures only.
NOTE: Students registered in a Biology or Biochemistry programme may not take this course for credit; may not be taken for credit with BIOL C206.
NOTE: Students who have received credit for BIOL C205 may not take this course for credit.

BIOL C222 ***Biostatistics I*** (3 credits)
Prerequisite: CEGEP Biology 301 or equivalent. Statistical methods for the biological sciences; sampling; experimental design; data description; elementary probability; binomial, Poisson and Normal distributions; statistical inference; hypothesis testing; chi-square; analysis of variance; correlation; regression; covariance analysis; and analogous non-parametric techniques. Lectures and laboratory. *NOTE See §200.7*

BIOL C230 ***Animal Biology*** (3 credits)
Prerequisite: CEGEP Biology 301 or equivalent. A survey of the major animal phyla, with emphasis on evolutionary trends, structure and function, behaviour and integration of organ systems. Lectures and laboratory.
NOTE: Students who have received credits for BIOL C234 may not take this course for credit.

BIOL C231 ***Biology of the Vertebrates*** (3 credits)
Prerequisite: CEGEP BIOL 301 or equivalent. A survey of the fishes, amphibians, reptiles, birds and mammals. Emphasis will be placed on phylogeny of the groups and the adaptations that fit them to their environments. Topics will include zoogeography, physiology, communication, reproduction, etc. Lectures only.
NOTE: This course may not be taken for credit with BIOL C230.

BIOL C232 ***Entomology I*** (3 credits)
Prerequisite: CEGEP BIOL 301 or equivalent. This course introduces the student to the variety and complexity of insect life. Basic classification is followed by a more detailed study of morphology and anatomy, together with some physiological considerations. Other topics such as adaptations for aquatic life, social behaviour, etc., will be discussed. Laboratories will begin with a field trip, the object of which will be to observe and collect various insect species. The rest of the laboratory sessions will complement the lectures. *Students are advised to begin an insect collection during the summer months preceding the course.* Lectures and laboratory.

BIOL C233 ***Entomology II*** (3 credits)
Prerequisite: BIOL C232. To the initiated students, this course will present an in-depth study of insect behaviour. Topics will include sensory physiology, insects and plants, light and sound production, population dynamics, and insect ecology. An attempt will be made throughout the course to emphasize the relationship between the structure and function of various insect parts. Lectures and seminars.

BIOL C234 ***Invertebrate Zoology I*** (3 credits)
Prerequisite: BIOL C201. The Protozoa, Acoelomate and Pseudocoelomate Invertebrates: A detailed survey of non-coelomate invertebrates which will deal in depth with the Protozoa, Porifera, Rotifera, Cnidaria, Platyhelminthes, Nematoda, and Acanthocephala. Emphasis in lectures will be placed on phylogeny, physiology, functional morphology, adaptations to specific environments and reproduction. Close attention will be paid to evolutionary trends within and between phylogenetic groups. Both origins of the metazoa from single-celled ancestors and the role of the lower metazoa in the evolution of higher animals will be examined. Laboratory work stresses morphology of both preserved and living material and, where possible, live specimens are used to demonstrate behaviour. Lectures and laboratories.
NOTE: This course may not be taken for credit with BIOL C230.

BIOL C235 ***Invertebrate Zoology II*** (3 credits)
Prerequisite: BIOL C234. The Coelomate Invertebrates: A detailed examination of the major coelomate invertebrate phyla including the Annelids, Molluscs, Arthropods (excluding Insects), Echinoderms and, if time permits, minor coelomate phyla. Lectures will stress functional morphology, physiology and reproduction. Emphasis in the laboratory will be on dissection of a selected representative from each group and a detailed examination of characteristics of a range of other representatives of each group. Where possible living specimens will be used to demonstrate behaviour. Lectures and laboratories.

BIOL C240 ***Plant Biology*** (3 credits)
Prerequisite: CEGEP BIOL 301 or equivalent. A survey of the major plant phyla, with emphasis on

evolutionary trends, distribution, life cycles, morphology, development, physiology, anatomy, and ecology. Lectures and laboratory.

BIOL C242 ***Economic Botany*** (3 credits)
Prerequisite: CEGEP Biology 301 or equivalent. Origin, development, and use of selected economic plants, including microorganisms. Their historical impact, prospects for future use, and importance to the Canadian economy are stressed, as well as world-wide problems of food and alimentation. Lectures only.

BIOL C250 ***Fundamentals of Ecology*** (3 credits)
Prerequisite: CEGEP BIOL 301 or equivalent. This course introduces factors which affect distribution and abundance of species; the physical-chemical environment, energy flow, and species interactions. Other topics introduced include adaptation to the abiotic and biotic environment, population regulation, ecological succession, species diversity and community structure. Lectures only.

BIOL C260 ***Genetics*** (3 credits)
Prerequisite: CEGEP Biology 301 or equivalent; CEGEP Biology 401 or equivalent recommended. A course to illustrate the fundamental principles of inheritance in plants, animals, and microorganisms. Mendelian genetics, gene linkage, and mutation will be covered. The role of DNA as the hereditary material and the genetic code will be studied in detail, as will the mechanisms of DNA, RNA, and protein synthesis. Lectures and laboratory.

BIOL C270 ***Introductory Microbiology*** (3 credits)
Prerequisite: CEGEP BIOL 301 or equivalent. Structure and function of bacteria and viruses as related to industry, health, agriculture, and ecology. Laboratory exercises will illustrate lecture material and introduce methods of handling microorganisms. Lectures and laboratory.

BIOL 298 ***Selected Topics in Biology*** (3 credits)

BIOL 299 ***Selected Topics in Biology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

BIOL C320 ***History of Biology*** (3 credits)
Prerequisite: Twelve credits from the Department of Biology. The lecture material is oriented toward the beginnings of formal biology in relation to the state of knowledge at the time, and the development of these ideas up to the beginning of the present century. Emphasis is on broad principles rather than on encyclopedic or biographical notes. Much illustrative or detailed information is provided by the class, since each student must present a seminar on a topic chosen from the history of biology. Lectures only.

BIOL C321 ***Evolution*** (3 credits)
Prerequisite: Any twelve credits from the Department of Biology. A course that examines concepts leading from Darwin's theory to a modern synthesis of evolution. Lectures only.

BIOL C323 ***Biology of Aging*** (3 credits)
Prerequisite: BIOL C230; BIOL C260. Aging as a biological process will be examined at physiological, evolutionary, genetic, cellular, and molecular levels. Current theories of aging will be examined: these include the rate-of-living theory, the error-catastrophe theory, the autoimmune theory, the cross-linkage theory, and the somatic-mutation theory. Studies on aging in protozoans, plants, animals, and cells in culture will be evaluated in relation to these theories. Lectures only.

BIOL C331 ***Comparative Vertebrate Anatomy*** (6 credits)
Prerequisite: BIOL C230. A comprehensive study of the development and structure of the systems of a representative series of vertebrates from a comparative and evolutionary point of view, with some emphasis on the mammals. In the laboratory, representatives of the principal classes of vertebrates will be dissected. Lectures and laboratory.

BIOL C332 ***Parasitology*** (3 credits)
Prerequisite: BIOL C230 or BIOL C234, previously or concurrently. A survey of the parasitic groups of invertebrates, with special reference to the parasites of man. Lectures and laboratory.
NOTE: This course may not be taken for credit with BIOL C339.

BIOL C333 ***Animal Physiology*** (6 credits)
Prerequisite: BIOL C230 or BIOL C235; CHEM C222 or 30 credits; enrolment in a Biology programme. An integrated study of basic physiological phenomena of vertebrates. Topics discussed include muscle function, nervous system, circulation, respiration, temperature regulation, digestion, metabolism, excretion, and endocrinology. Lectures and laboratory.

BIOL C334 ***Vertebrate Embryology*** (3 credits)
Prerequisite: BIOL C230. The fundamental processes of growth and development in vertebrates will be examined. Morphogenetic events in selected vertebrate species will be compared by laboratory study. Topics covered will include reproduction, gemetogenesis, fertilization, cleavage patterns,

gastrulation, organogenesis, metamorphosis, regeneration and extra-embryonic membranes. Lectures and laboratory.

BIOL C335 ***Histology I*** (3 credits)
Prerequisite: BIOL C230; BIOL C331 recommended. A comparative study of the microscopic characteristics of cells, tissues, and organs of vertebrates. Lectures and laboratory.

BIOL C336 ***Histology II*** (3 credits)
Prerequisite: BIOL C335. An advanced comparative study of the vertebrate organ systems at the ultrastructural and histological level. Those registered will be expected to participate in a seminar. Lectures and laboratory.

BIOL C341 ***Biology of the Fungi*** (3 credits)
Prerequisite: BIOL C270. A study of the morphology, taxonomy, phylogeny, and ecology of the fungi; their importance in agriculture, industry, medicine, and research will be emphasized. Lectures and laboratory.

BIOL C342 ***Eastern North American Flora*** (3 credits)
Prerequisite: BIOL C240, previously or concurrently. A study of higher plant life occurring in Eastern North America, including recognition, collection, identification, classification, and distribution. Field work for practical experience with the regional flora in various habitats. Lectures and laboratory.

BIOL C344 ***Biology of Algae*** (3 credits)
Prerequisite: BIOL C240. Taxonomy, physiology, and ecology of algae, with special consideration of their involvement in water pollution, sewage treatment, primary production, and their utilization in industry. Lectures and laboratory.
NOTE: Students who have received credit for BIOL C246 may not take this course for credit.

BIOL C345 ***Horticultural Science*** (3 credits)
Prerequisite: BIOL C240. The scientific concepts of horticulture are emphasized. Topics include plant breeding for adaptation to climate, chemical regulation of plant processes and effects on crop yield, environmental factors in crop production, pollutant impact on horticulture, problems in bulk storage, processing and marketing of perishables. The role of horticultural science in meeting world food requirements, as well as its impact on society, are discussed. Lectures only.

BIOL C347 ***Plant Anatomy*** (3 credits)
Prerequisite: BIOL C240. A study of the internal structure of the plant as related to the processes of growth and metabolism. An experimental approach is presented to the study of the relationship between structure and function of various parts of the plant. The study of pathological, ecological, and economic aspects of anatomy, with emphasis on developmental anatomy. Laboratory work includes the preparation of permanent slides, using plant microtechnique. Lectures and laboratory.

BIOL C348 ***Plant Physiology*** (6 credits)
Prerequisite: BIOL C240; CHEM C221; CHEM C222. A study of physiological processes of higher plants, including mineral nutrition, water absorption, transport, transpiration, photosynthesis, carbohydrate and nitrogen metabolism, respiration; plant responses to growth regulators, their mechanism of action, and their role in plant growth and metabolism. Lectures and laboratory.

BIOL C351 ***Field and Laboratory Ecology*** (3 credits)
Prerequisite: BIOL C222; BIOL C250; permission of the Department. An introduction to the methods of qualitative and quantitative studies of aquatic and terrestrial ecosystems. Students will gain experience in techniques of field investigation. Field trips and laboratory work.

BIOL C352 ***Plant Field Ecology*** (3 credits)
Prerequisite: BIOL C222; BIOL C240; BIOL C250. This course is normally offered for a two-week period during August at the Lacolle Centre. It will involve identification of local plant species, methods of sampling of communities, and examination of the pattern of plant communities in the area. Handling of data on populations and communities will be discussed, as well as statistical analysis of population and community data. A mixture of formal lectures, organized field studies, and informal discussion. Students will be required to hand in a written report after the course has ended.

BIOL C353 ***Intermediate Ecology*** (3 credits)
Prerequisite: BIOL C250. An in-depth analysis of factors affecting distribution and abundance of plants and animals. Environmental physiology, adaptations of plants and animals; population structures and behaviour patterns as responses to the physical environment will be discussed. Lectures only.

BIOL C355 ***Fundamentals of Limnology*** (3 credits)
Prerequisite: BIOL C250, previously or concurrently. An introduction to the study of fresh-water ecosystems, with major emphasis on geographical, physical, and chemical characteristics. The major topics include the origin of lake basins, lake morphology and morphometry, waves and currents, the optical and thermal properties of lakes, dissolved chemicals. Some aspects of water pollution are considered. Lectures only.

BIOL C356 ***Microbial Ecology*** (3 credits)
Prerequisite: BIOL C250; BIOL C270. The properties of microbial habitats, structure and dynamics of

microbial communities and their role in the decomposition processes. Particular stress will be placed on the interractions between microbes and higher organisms in terrestrial ecosystems that mediate the cycling of nutrients between biotic and abiotic parts of the system. Lectures and laboratory.

BIOL C361 ***Cellular Metabolism I*** (3 credits)
Prerequisite: CHEM C221; CHEM C222. The course will cover various simple aspects of metabolism in both animals and plants, distribution of cell organelles and their metabolism, energy production and utilization, nucleic acids and protein synthesis. Lectures only.
NOTE: This course may not be taken for credit with CHEM C271.

BIOL C362 ***Cellular Metabolism II*** (3 credits)
Prerequisite: BIOL C361 or CHEM C271. Emphasis will be placed on various aspects of intermediary metabolism, regulation of cellular processes and bioenergetics; transmission and expression of genetic information. Lectures and laboratory.

BIOL C363 ***Genetics of Higher Organisms*** (3 credits)
Prerequisite: BIOL C260. This course will cover various aspects of the genetics of multicellular and eukaryotic organisms, including cytogenetics, developmental, human, behavioural, and population genetics, as well as somatic cell genetics. Lectures only.

BIOL C364 ***Cell Physiology*** (3 credits)
Prerequisite: CHEM C221; CHEM C222 or 30 credits; enrolment in Biology Honours, Specialization or Major programme. A survey of the mechanisms involved in functions of single cells and subcellular components, particularly organelles; membrane phenomena, motility, bioenergetics, and cellular responses to environmental stress, including ionizing radiation, cold, and hydrostatic pressure. Lectures and laboratory.

BIOL C365 ***Cytology*** (3 credits)
Prerequisite: CHEM C221; CHEM C222; 30 credits; enrolment in Biology Honours, Specialization or Major programme. Cell structure and ultrastructure, with reference to organelle function; microscopic and cyto-chemical techniques of analysis. Emphasis is on experimental, molecular, and ultra-structure analysis, to achieve a correlation between cell structure and function. Lectures and laboratory.

BIOL C370 ***Intermediate Microbiology*** (3 credits)
Prerequisite: BIOL C270; CHEM C221; CHEM C222;CHEM C271 recommended. Designed to continue from BIOL C270. Nutrition and metabolism of microorganisms, with special emphasis on metabolic processes unique to microorganisms (fermentations, oxidation of inorganic compounds, aerobic respiration, and anaerobic respiration). Basic immunology and immunochemistry; brief discussion of microbes in medicine and industry. Laboratory will include metabolic and serologic methods of identifying microorganisms. Lectures and laboratory.

BIOL C380 ***Nutrition*** (3 credits)
Prerequisite: CHEM C221; CHEM C222; CHEM C271 recommended. The concept of a balanced diet will be studied in relation to caloric content, and to protein, lipid, carbohydrate, vitamin, and mineral requirements. The consequences of dietary deficiencies will be examined. Special topics such as dieting, organic foods, megavitamins, food additives, and toxins will be discussed. Lectures only.

BIOL 398 ***Intermediate Topics in Biology*** (3 credits)

BIOL 399 ***Intermediate Topics in Biology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

BIOL C420 ***Radiation Biology and Radiotracer Methodology I*** (3 credits)
Prerequisite: BIOL C260; BIOL C364. A survey of the elements of radiation physics, with emphasis on the properties of ionizing radiation and its interaction with matter, including dosimetry and methods of radiation counting. The biological effects of radiation at the macromolecular, cellular, and organismal level will be considered. Lectures and laboratory.

BIOL C431 ***Biology of Fishes*** (3 credits)
Prerequisite: BIOL C231. This introduction to fish biology will include a study of anatomy, physiology, and classification of the major groups of fishes, as well as their ecology and zoogeography. Emphasis will be placed on freshwater fishes. Lectures and laboratory.

BIOL C433 ***Neurology*** (6 credits)
Prerequisite: BIOL C331. A study of the anatomy and physiology of the nervous systems of vertebrates, especially of the mammals and man. Lectures and laboratory.

BIOL C435 ***Advanced Parasitology*** (3 credits)
Prerequisite: BIOL C332. An examination of the biological aspects of parasitism. Proposed topics include host findings behaviour, distribution of parasites within host populations, seasonal variation in parasite populations and its causes, interspecific and intraspecific interactions among parasites and the evolution of host parasite relations. Lectures and laboratory.
NOTE: Students who have received credit for BIOL C339 may not take this course for credit.

BIOL C436 ***Biology of the Mammals*** (3 credits)
Prerequisite: BIOL C231; third-year standing. A survey of the Class Mammalia. Theories as to the origin of mammals, and the distribution, ecology and adaptations of modern mammals will be examined. A term paper on a subject chosen in consultation with the instruction will be required. Lectures only.

BIOL C441 ***Plant Biochemistry*** (3 credits)
Prerequisite: BIOL C348 or CHEM C271. Biochemical study of the natural constituents and secondary metabolites unique to plants. Their biosynthesis, biotransformations, and functions in plants, as well as their economic and pharmacologic importance will be stressed. Lectures only.

BIOL C452 ***Ecological Genetics*** (3 credits)
Prerequisite: BIOL C250; BIOL C260; BIOL C353 or permission of the Department. A course emphasizing the interface between ecology, population genetics and evolution: the study of genetic variation in natural populations and its relevance to evolutionary processes. Topics include, measuring genetic diversity in natural populations; patterns of diversity; selection; phenotype versus genotype in evolution; neutral variation, genetic load; genetic structure; the species concept; the unit of evolution; Neo-Darwinism and the modern synthesis. Lectures only.

BIOL C454 ***Population Ecology*** (3 credits)
Prerequisite: BIOL C353. A theoretical approach to ecological problems. Evolutionary aspects of ecological problems, population dynamics, species diversity, stability of ecosystems, regulation of population size, competition, and predation. Lectures only.

BIOL C460 ***Molecular Genetics*** (3 credits)
Prerequisite: BIOL C260; or BIOL C360; CHEM C271 previously or concurrently, or permission of the Department. Basic microbial and molecular genetics, including isolation and characterization of mutants, methods of mapping mutants, transposons, episomes, and recombinant DNA techniques. Lectures and conferences.

BIOL C461 ***Advanced Genetics*** (3 credits)
Prerequisite: BIOL C260 or BIOL C360. Directed readings and seminars in classical and contemporary genetics designed to expose the student to research literature and problems. Students will probe in greater depth areas of particular interest in order to develop a critical sense and deepen an understanding of past and current work in this field. Seminars only.

BIOL C462 ***Immunology*** (3 credits)
Prerequisite: BIOL C260; BIOL C364; CHEM C271 previously or concurrently. A course in modern immunology stressing the following areas of study: the structure and properties of antigens and antibodies; the nature of the immune response; cellular-antibody synthesis; genetic aspects of antibody synthesis; theories relating antibody specificity to genetic potential. Lectures and conferences.

BIOL C463 ***Developmental Biology*** (3 credits)
Prerequisite: BIOL C260; BIOL C334. This course will examine mechanisms of cell and tissue interactions in development and differentiation. Cell sorting and recognition, as well as the processes controlling growth and regeneration will be analyzed from an experimental point of view. Experiments involving gene transplants, nuclear transplants and allophenic mice will be discussed to gain insights on the genetic control of development. Lectures only.

BIOL C464 ***Advanced Cell Physiology*** (3 credits)
Prerequisite: BIOL C364; CHEM C271 previously or concurrently. Lectures and seminars dealing with selected topics in cell physiology, emphasizing a molecular experimental approach. Lectures only.

BIOL C465 ***Biological Regulatory Mechanisms*** (3 credits)
Prerequisite: BIOL C260; CHEM C271; or permission of the Department. The molecular basis of the control of metabolic pathways, with an emphasis on procaryote systems. The course concentrates on the analysis of the rationale of experimentation used to elucidate these regulatory mechanisms. Lectures and conferences.

BIOL C467 ***Cytogenetics*** (3 credits)
Prerequisite: BIOL C260; BIOL C365; or permission of the Department. A detailed study of eukaryotic chromosomes, plant and animal, their structures and behaviour, normal and abnormal; species evolution and stabilization; various anomalies, ploidy, heterosis, apomixy; human cytogenetics. Lectures only.

BIOL C470 ***Microbial Physiology*** (3 credits)
Prerequisite: BIOL C270; CHEM C271; 3 other advanced credits in biochemistry previously or concurrently; or permission of the Department. Comparative biochemistry of procaryotes—a study of the biochemical activities underlying the life of microorganisms. A description of the diverse biochemical adaptations used by microorganisms to obtain energy and building materials from their various environments. Lectures and conferences.

BIOL C480 ***Ecotoxicology*** (3 credits)
Prerequisite: BIOL C250; CHEM C221; CHEM C222; 60 credits; enrolment in Biology or Chemistry

Honours, Specialization or Major programme. An investigation of special problems in environmental toxicology. The impact of pollution on various ecosystems, including freshwater, marine and terrestrial, will be examined. Topics will include the effect of pollutants on species diversity and distribution, on successional rates and on community energy budgets. Major sources and the movement of environment pollutants will be discussed. Of particular interest will the the subjects of bioaccumulation and biomagnification. Lectures only.
NOTE: Students who have received credit for BIOL C450 may not take this course for credit.

BIOL C481 ***Principles of Toxicology*** (3 credits)
Prerequisite: 60 credits; enrolment in Biology or Chemistry Honours, Specialization or Major programme. An introduction to the terminology, research approaches and priority issues in the field of toxicology with particular reference to environment. Dose-effect and response relationships will be examined in reference to acute, chronic and intermittent exposures to toxic agents. Paradigms for the evaluation of single and multiple toxicity will be discussed. There will be an account of the procedures for establishing environmental quality standards, and making safety evaluations. Threshold determinations, application factors, surrogate species extrapolations and structural-activity relationships will be considered.
NOTE: Students who have received credit for BIOL C451 may not take this course for credit.

BIOL C490 ***Independent Study*** (6 credits)
Prerequisite: Third-year standing in Honours Biology, or permission of the Department. In this course, the student undertakes a special research project selected in consultation with, and conducted under, the supervision of a faculty member of the Department. The project is intended to develop the student's knowledge of standard scientific procedures, including methods of researching scientific literature, the planning and execution of experimental and analytical procedures, the writing of a formal report, and the presentation of a seminar on the project.
NOTE: Students may register in September, January or June for this course, but work must continue over two consecutive semesters.

BIOL 498 ***Advanced Topics in Biology*** (3 credits)

BIOL 499 ***Advanced Topics in Biology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.040 Canadian Studies

Coordinator
G. DECARIE, *Associate Professor*

The Canadian Studies Programme seeks to give students a better understanding of the diverse origins and multi-faceted character of Canada. It provides the opportunity to obtain a liberal arts education given direction and depth by a focus on Canada.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students should consult with the Programme Coordinator prior to registering for Canadian Studies courses.

60 BA Specialization in Canadian Studies
6 CDNS C220[6]
6 ENGL C290[6]; or ENGL C291[3] and C292[3]
6 French Language, at a level to be determined *in consultation with the Département d'Études Françaises*
6 HIST C203[3] and C205[3]
6 CDNS C421[6]
30 Elective credits in related Canadian content courses, *chosen in consultation with the Coordinator*, from Anthropology, Art History, Communication Studies, Economics, Education, English, Études Françaises, Geography, History, Interdisciplinary Studies, Journalism, Political Science, Religion, Sociology, and World Music.

42 BA Major in Canadian Studies
6 CDNS C220[6]
6 ENGL C290[6]; or ENGL C291[3] and C292[3]
6 French Language, at a level to be determined *in consultation with the Département d'Études Françaises*
6 HIST C203[3] and C205[3]
6 CDNS C421[6]
12 Elective credits in related Canadian content courses, *chosen in consultation with the Coordinator*, from Anthropology, Art History, Communication Studies, Economics, Education, English, Études Françaises, Geography, History, Interdisciplinary Studies, Journalism, Political Science, Religion, Sociology, and World Music.

30 Minor in Canadian Studies
6 CDNS C220[6]
6 ENGL C290[6]; or ENGL C291[3] and C292[3]
6 French Language, at a level to be determined *in consultation with the Département d'Études Françaises*
6 HIST C203[3] and C205[3]
6 CDNS C421[6]

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

CDNS C220 ***Introduction to Canadian Studies*** (6 credits)
Prerequisite: First-year standing Canadian Studies Major, or permission of the Coordinator. An introduction to some of the problems which have been explored by the humanities and social sciences in the study of Canada. The themes will vary from year to year and could cover topics such as the industrialization of Quebec, immigrant and ethnic traditions, and the Americanization of Canada.
NOTE: Students who have received credit for INTE C220 may not take this course for credit.

CDNS 298 ***Selected Topics in Canadian Studies*** (3 credits)

CDNS 299 ***Selected Topics in Canadian Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

CDNS 398 ***Selected Topics in Canadian Studies*** (3 credits)

CDNS 399 ***Selected Topics in Canadian Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

CDNS C421 ***Seminar in Canadian Studies*** (6 credits)
Prerequisite: CDNS C220 or permission of the Coordinator. This is an advanced seminar in Canadian

Studies which emphasizes an interdisciplinary approach to certain concerns or characteristics of Canada and Canadians. It will normally be taken by students near the end of a Canadian Studies Programme.
NOTE: Students who have received credit for INTE C421 may not take this course for credit.

CDNS 498 ***Advanced Topics in Canadian Studies*** (3 credits)

CDNS 499 ***Advanced Topics in Canadian Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.050 Chemistry

Chairman
C.H. LANGFORD, *Professor*

Professors
P.H. BIRD
L.D. COLEBROOK
T. NOGRADY
N. SERPONE
O.S. TEE
J.R. UFFORD
R.H.C. VERSCHINGEL

Associate Professors
T.J. ADLEY
M. BALDWIN
S.J. DAUNT
M. DOUGHTY
K. EKLER
Z. HAMLET
M.G. HOGBEN
M.J. KORNBLATT
D.E. McELCHERAN
R.H. PALLEN
R.T.B. RYE
R.E. TOWNSHEND
G.J. TRUDEL
R.A. WESTBURY
R.H. ZIENIUS

Research Associate Professor
R. LE VAN MAO

Assistant Professors
G. DENES
A. ENGLISH
J. FRASER
D. POCOCK

Research Associates
M. MAK
D. SHARMA

Students are responsible for satisfying their particular degree requirements.

All students are advised to include a course in a computer language in their degree programme.

The superscript indicates credit value.

NOTE: The Order of Chemists of Quebec has fully accredited the curricula of i) Honours in Chemistry, ii) Specialization in Analytical Chemistry, iii) Specialization in Biochemistry, iv) Specialization in Chemistry. Upon satisfactory completion of any of the above-mentioned programmes, a graduate is eligible for membership in the Order. A working knowledge of French is required.

Students should note that CHEM C419, C450, and C479 have a performance prerequisite and are essential for Honours and Specialization programmes. Students who cannot meet these prerequisites will not be able to complete the programmes but may complete a Major. For more details, students should consult with the Department.

45 Core Programme in Chemistry
39 CHEM C211^{6}, C221^{3}, C222^{3}, C231^{2}, C233^{2}, C241^{3}, C271^{3}, C312^{3}, C324^{3}, C325^{3}, C331^{2}, C332^{2}, C338^{2}, C339^{2}
6 Chosen from either CHEM C242^{3}, C341^{3} or, CHEM C374^{3}, C375^{3}

BSc Honours in Chemistry
An Honours in Chemistry programme shall consist of completion of the requirements of any one of the Specialization programmes offered by the Department, with the election of CHEM C450^{6} as appropriate.

Students must meet the University regulations concerning the Honours degree.
Honours students in second year and beyond are expected to attend Departmental Seminars.

60 BSc Specialization in Chemistry
45 Core Programme
3 MATH C220^{3}
12 Additional credits in Chemistry, which must include *CHEM C419^{6}, in one area of concentration (i.e., inorganic, physical, etc.)

**With Departmental permission, the student may substitute CHEM C450^{6} for CHEM C419^{6}.*

69-72 BSc Specialization in Biochemistry
45 Core Programme
9 BIOL C260^{3}, C270^{3}, C364^{3}
Biochemistry Option (69 credits total)
3** CHEM C479^{3}
6 Chosen from CHEM C471^{3}, C473^{3}, C474^{3}, C475^{3}, C476^{3}, C478^{3}, 498^{3}*
3** 400-level CHEM
3 400-level BIOL
**(the topic must be in Biochemistry)*
***These 6 credits may be replaced with CHEM C450^{6}, with Departmental approval.*
Medicinal Chemistry Option (72 credits total)
3 CHEM C479^{3}
6 BIOL C336^{6}
6 CHEM C473^{3} and C474^{3}
3 CHEM C475^{3} or C476^{3}

63-64 BSc Specialization in Analytical Chemistry

45 Core Programme
6 CHEM C290[3], C311[2], C316[1]
3-4 CHEM C392[3]
or
PHYS C295[2], C296[2]
3 Chosen from CHEM 398[3] or 498[3] (the topic must be in Analytical Chemistry)
6 *CHEM C419[6] (the topic must be in Analytical Chemistry)

With Departmental permission, the student may substitute CHEM C450[6] for CHEM C419[6].

78 BSc Specialization in Geology-Chemistry
See Section 31.140 Geology

45 BSc Major in Chemistry

45 Core Programme
Substitution of courses from within the Core Programme by other courses in Chemistry or related disciplines (Mathematics, Physics, Biology, Geology) up to a maximum of 9 credits, will be accepted, if previously approved by a Departmental programme adviser. It is expected that such substitutions will be in accord with the overall programme of study being followed by the student.

45 BSc Major in Biochemistry

36 Core Programme, but *without* CHEM C312[3], C332[2], C338[2], C339[2]
9 Chosen from CHEM C479[3]*; BIOL C260[3], C270[3], C364[3]

There is a grade requirement stated in the prerequisite for this course.

24 Minor in Chemistry

24 Chosen from the Department's offerings, with due regard to prerequisites, such that the courses chosen form a coherent pattern which complements the student's other areas of study. The course pattern chosen must have been previously approved by a Departmental programme adviser.

33 Certificate in Scientific Measurement (Chemistry Option)

19 CHEM C211[6], C290[3], C312[3], C392[3], C491[4]
14 PHYS C295[2], C296[2], C396[5], C397[5]

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

CHEMISTRY CO-OPERATIVE PROGRAMME

Director
R.E. TOWNSHEND, *Associate Professor*

The Chemistry Co-operative Programme is offered to students who are enrolled in the BSc Honours or Specialization in Chemistry, Biochemistry, or Analytical Chemistry.

Students in CHEM Co-Op take the regular academic programme. The schedule of academic and work periods for an entering group of CHEM Co-Op students is given in §31.510.

The overseeing of the CHEM Co-Op programme is the responsibility of the Director and the departmental Co-Op Committee, which provides the connecting link between students, employers and the Centre for Co-Operative Education.

Students interested in applying for the CHEM Co-Op should refer to §31.510, where a full description of the admission requirements is provided, or write to The Director, Centre for Co-Operative Education, 7308 Sherbrooke Street West, Montreal, Quebec, H4B 1R6. For information by telephone see "CONTACTS" in §31.510.

A student may be exempted from one or more of the introductory courses, on the basis of work done at CEGEP level. Where exemptions are given, the courses must be replaced with an equivalent number of credits in the sub-discipline involved, in order that the student successfully complete any of the programmes approved by the Order of Chemists of Quebec.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

CHEM C205 ***General Chemistry I*** (3 credits)
Stoichiometry, states of matter, atomic structure, electron structure of atoms, the periodic table, periodic properties, bonding, solids. Lectures and laboratories.
NOTE: This course presumes a good grounding in secondary school mathematics. Students lacking such grounding, or non-Science students seeking only an awareness of chemistry, are advised to enrol in CHEM C208[3].
NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration.

CHEM C206 ***General Chemistry II*** (3 credits)
Prerequisite: CHEM C205. Thermochemistry, solutions and their properties, equilibrium, ionic equilibrium, pH, buffers, kinetics, reaction mechanisms, other selected topics related to biochemistry, biology, and engineering. Lectures and laboratories.
NOTE: Students in programmes leading to the BSc degree may not take this course for credit to be applied to their programme of concentration.

CHEM C208 ***Chemistry for Non-Science Students*** (3 credits)
This course covers aspects of chemistry which are of general interest to the non-science student. Sections deal with the social impact of chemistry and with the chemistry of the natural and man-made environments. The necessary non-quantitative knowledge of chemistry is developed as the course unfolds.
NOTE: This course is not a prerequisite for any chemistry course. This course may not be taken for credit by Science students.

CHEM C211 ***Introductory Analytical Chemistry*** (6 credits)
Prerequisite: CEGEP CHEM 201; CEGEP PHYS 301; CEGEP MATH 103; 203; or equivalent courses. Precipitation methods and solubility products; chemical equilibria and titration curves of neutralization, precipitation, complexation, oxidation-reduction, and non-aqueous systems; treatment of analytical data; potentiometry and potentiometric titrations; introduction to spectroscopy, in particular, molecular and atomic absorption spectroscopy. Laboratory must be taken concurrently and provides experience in the analytical techniques discussed in lectures. Lectures and laboratory.
NOTE: A student who has obtained credits for GEOL C324 may not take this course for credit.

CHEM C221 ***Introductory Organic Chemistry I*** (3 credits)
Prerequisite: CEGEP Chemistry 201 or equivalent. Basic aspects of orbitals and their role in covalent bonding; delocalization of electrons. Alkanes: structure, nomenclature, isomerism, reactions. Introductory stereochemistry: enantiomers, diastereomers, conformers, Fischer and Newman projections, specification of chirality, E/Z isomerism. Conformations of cyclic compounds. Alkylhalides: S_N1, S_N2, E_1, E_2 reaction mechanisms. Free-radical reactions, organometallic compounds. Chemistry of alcohols, ethers and related compounds. Chemistry of alkenes, alkynes and dienes. Lectures and laboratory.

CHEM C222 ***Introductory Organic Chemistry II*** (3 credits)
Prerequisite: CHEM C221 or one semester CEGEP Organic Chemistry. Introduction to the use of IR and NMR spectroscopy for the identification of simple organic compounds. Benzene and aromatic compounds: aromaticity, electrophilic aromatic substitution, nucleophilic aromatic substitution, substituent effects. Chemistry of aldehydes and ketones: nucleophilic addition, oxidation, reduction and condensation reactions, tautomerism. Chemistry of carboxylic acids and their derivatives: Amines, basicity, reactions. Lectures and laboratory.

CHEM C231 ***Physical Chemistry I: Introduction*** (2 credits)
Prerequisite: CEGEP Chemistry 201; CEGEP Physics 301; CEGEP Mathematics 103; CEGEP Mathematics 203; or equivalent courses. First law of thermodynamics, thermochemistry, entropy, the second and third laws of thermodynamics, free energy and chemical equilibrium, electrochemical cells and the Nernst equation, the Gibbs-Helmholtz equation. Applications of thermodynamics to systems of chemical interest. Lectures only.

CHEM C233 ***Physical Chemistry II: Spectroscopy and Quantum Theory*** (2 credits)
Prerequisite: CHEM C231. The course introduces the student to the ideas of quantum mechanics, spectroscopy and the electronic structure of atoms and molecules. Topics will include the origins and postulates of quantum theory; applications to simple systems; the hydrogen atom, the aufbau principle of the elements, simple molecules. Spectroscopy and spectroscopic measurement; simple atomic spectra; infra-red and Raman spectra of simple molecules; fluoroescence; N.M.R. Lectures only.

CHEM C241 ***Inorganic Chemistry I: Introduction to Periodicity and Valence Theory*** (3 credits)
Prerequisite: CEGEP CHEM 201; CEGEP PHYS 301; CEGEP MATH 103; 203; or equivalent courses. The structure of the atom; the periodic table; properties of atoms, covalent bonding treatments including Lewis theory, valence shell electron pair repulsion theory of structure, valence bond and molecular orbital theory. Crystal field theory applied to the structure and properties of transition metal complexes. Bonding theories of metallic materials and semi-conductors. Lectures and laboratory.

CHEM C242 ***Inorganic Chemistry II: The Chemistry of the Main Group Elements*** (3 credits)
Prerequisite: CEGEP CHEM 201; CEGEP PHYS 301; CEGEP MATH 103; 203; or equivalent courses. A survey of the properties and reactions of: Hydrogen; Group IA, Lithium to Cesium; and IIA, Beryllium to Radium; including the theory of ionic bonding and structure. The descriptive chemistry of Groups IIIA, Boron to Thallium; IVB, Carbon to Lead; VB, Nitrogen to Bismuth; VIB, Sulphur to Polonium; VIIB, the Halogens; and the Chemistry of the noble gases. Lectures and laboratory.

CHEM C271 ***Introductory Biochemistry*** (3 credits)
Prerequisite: CHEM C222. An introduction to the essentials of biochemistry: protein structure, enzymology, carbohydrate metabolism and its regulation; and an overview of bioenergetics, nucleic acids and protein biosynthesis. Lectures and laboratory.
NOTE: Students who have received credit for CHEM C371 or CHEM C372 or CHEM C373 may not take this course for credit.

CHEM C290 ***Laboratory Automation and Data Handling*** (3 credits)
Prerequisite: COMP C211, or an equivalent course in a high level computer language; CHEM C211, previously or concurrently; written permission of the Department. Introduction to some modern techniques used to transduce and manipulate raw chemical data. Topics to be discussed will include:

statistical treatment of chemical data, using programmes written in Basic, or other high-level language; the use of binary, decimal, and hexadecimal numbers; programming a single-board computer or modern microcomputer using machine and assembly languages; input-output operations; elementary interfacing techniques. Experiments will involve the collection and treatment of data from common laboratory instruments such as electrodes and photodetectors. Lectures, tutorials and laboratory.

CHEM 298 ***Selected Topics in Chemistry*** (3 credits)

CHEM 299 ***Selected Topics in Chemistry*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

CHEM C302 ***Industrial Chemistry, Resources and Environment*** (2 credits)
Prerequisite: Must be registered in a Chemistry programme and be within 42 credits of graduation; or permission of the Department. An introduction to chemical engineering for chemists. Management and conservation of resources; pollution control; occupational and environmental health; technological and environmental impact assessment.

CHEM C303 ***Chemical Technology and Human Values*** (2 credits)
Prerequisite: Must be registered in a Chemistry programme and be within 42 credits of graduation; or permission of the Department. The history of technology; the impact of chemistry on material life; appropriate technologies; chemistry and war; the social responsibility of the scientist.

CHEM C311 ***Introductory Analytical Organic Chemistry*** (2 credits)
Prerequisite: CHEM C211; CHEM C222; or CHEM C222; 6 credits in Biology course(s) with laboratory; CHEM C316 concurrently. Identification of organic compounds by physical, chemical and instrumental methods. Discussion of generalized analytical procedures, and of the basic principles and applications of relevant instrumentation. Use of data bases in interpretation of IR and UV spectra and in identification of compounds. Lectures only.

CHEM C312 ***Intermediate Analytical Chemistry*** (3 credits)
Prerequisite: CHEM C211. A continuation of CHEM C211, with emphasis on instrumental methods of analysis. Emission spectroscopy; X-ray spectroscopy; voltammetry and polarography; amperometric titrations; coulometry and coulometric titrations, conductometry; chromatography with particular emphasis on gas chromatography, and high performance liquid chromatography. Laboratory is taken concurrently and provides experience in analytical techniques described in lectures. Lectures and laboratory.
NOTE: Students who have received credit for any of CHEM C310, CHEM C314, CHEM C315, or CHEM C319, may not take this course for credit.

CHEM C316 ***Introductory Analytical Organic Laboratory*** (1 credit)
Prerequisite: CHEM C211; CHEM C222; or CHEM C222; 6 credits in Biology course(s) with laboratory; CHEM C311 concurrently. Semimicro analytical methods, semimicro preparative methods, spectroscopic methods and computer-assisted data base searches used in identifying organic compounds. Laboratory only.

CHEM C321 ***Organic Stereochemistry*** (2 credits)
Prerequisite: CHEM C222, or equivalent; CHEM C232. Conformational analysis of acyclic and cyclic systems. Relationship to physical properties and chemical reactivity: Chirality, enantiomerism, diastereomerism, prochirality, enantiotopism, and diastereotopism. Examples from steroid, carbohydrate, and enzyme mediated reactions. Lectures only.

CHEM C322 ***Organic Reactions*** (2 credits)
Prerequisite: CHEM C321; CHEM C331, previously or concurrently. A mechanistic survey of reactions of major synthetic utility. Determination of reaction mechanisms. Importance of reactive intermediates: carbocations, carbanions, radicals, and carbenes. Lectures only.

CHEM C323 ***Bio-Organic Chemistry*** (2 credits)
Prerequisite: CHEM C321. Chemistry of carbohydrates. Aspects of heterocyclic chemistry, particularly as they apply to purines, pyrimidines, and important coenzymes: pyridoxal, NADH, thiamine, flavines. Model-enzyme studies. Lectures only.

CHEM C324 ***Organic Chemistry III: Organic Reactions*** (3 credits)
Prerequisite: CHEM C222, or equivalent; CHEM C331, previously or concurrently. A mechanistic survey of reactions of major synthetic utility. Determination of reaction mechanisms. Importance of reactive intermediates: carbocations, carbanions, radicals, and carbenes. Lectures and laboratory.
NOTE: Students who have received credit for CHEM C321 or CHEM C322 may not take this course for credit.

CHEM C325 ***Organic Chemistry IV: Organic Structure and Stereochemistry*** (3 credits)
Prerequisite: CHEM C324. Organic structure and stereochemistry including the relationship of stereochemistry to physical properties and chemical reactivity. Determination of organic structure

and stereochemistry by chemical and spectroscopic means. Identification of organic compounds (principally in the laboratory section). Lectures and laboratory.
NOTE: Students who have received credit for CHEM C321 or CHEM C322 may not take this course for credit.

CHEM C327 ***Organic Chemistry of Polymers*** (3 credits)
Prerequisite: CHEM C222 or equivalent. Introduction to the fundamental aspects of polymers and polymerization. Methods of preparation, reaction mechanisms of polymer synthesis including condensation polymerization; addition polymerization: free radical, anionic, cationic; Ziegler-Natta (heterogeneous) polymerization. Lectures and problem sessions.
NOTE: Students who have received credit for CHEM C328 may not take this course for credit.

CHEM C329 ***Organic Reactions Laboratory*** (2 credits)
Prerequisite: CHEM C322 or CHEM C323, previously or concurrently; CHEM C331. Experiments with reactions of synthetic and mechanistic importance. Reactions involving reactive intermediates. Kinetic and thermodynamic control. Rearrangements. Laboratory only.

CHEM C331 ***Physical Chemistry III: Kinetics*** (2 credits)
Prerequisite: CHEM C233. Kinetic molecular theory. Topics in chemical-reaction kinetics, including: mechanisms of elementary reactions; theories of chemical reaction rates; free-radical reactions; factors influencing rates of reactions in solution; acid-base catalysis; catalysis by enzymes; the Michaelis-Menten mechanism; inhibition in enzyme-catalyzed reactions. Lectures only.

CHEM C332 ***Physical Chemistry IV: Thermodynamics*** (2 credits)
Prerequisite: CHEM C233. Comparison of closed and open systems. Partial molal quantities. Chemical potential. Real gases. Fugacity. Equilibrium constant. Free-energy function. Ideal solutions. Real solutions. Duhem-Margules equation. Lectures only.

CHEM C334 ***Intermediate Physical Chemistry II*** (2 credits)
Prerequisite: CHEM C331. The molecular properties of matter, and an introduction to chemical spectroscopy. Lectures only.

CHEM C336 ***Physical Chemistry of Polymers*** (3 credits)
Prerequisite: CHEM C222; CHEM C233. Physical properties of polymers; polymer-solution theory; molecular-weight distributions and fractionation; molecular-weight determinations by colligative properties, light-scattering and ultra-centrifuge techniques; kinetics of condensation and addition polymerizations; co-polymerization. Lectures and problem sessions.
NOTE: Students who have received credit for CHEM C335 or CHEM C435 may not take this course for credit.

CHEM C338 ***Physical Chemistry Laboratory I*** (2 credits)
Prerequisite: CHEM C233. Experiments in physical chemistry to illustrate some of the concepts studied previously, and to acquire basic dexterity in the physical chemistry laboratory. Laboratory only.

CHEM C339 ***Physical Chemistry Laboratory II*** (2 credits)
Prerequisite: CHEM C233. Further experiments in physical chemistry. The student will be expected to investigate more complex systems and to write meaningful laboratory reports. Laboratory only.

CHEM C341 ***Inorganic Chemistry III: The Transition Metals*** (3 credits)
Prerequisite: CHEM C211; CHEM C241; CHEM C242. Theories of bonding in transition metal complexes, including ligand field theory, applied to structure, physical properties, and reactivity of transition metal complexes: organometallic chemistry and catalysis. Metals in Biological systems. Lectures and laboratory.
NOTE: Students who have received credit for CHEM C342 or CHEM C348 may not take this course for credit.

CHEM C342 ***Chemistry of the Transition Elements*** (2 credits)
Prerequisite: CHEM C241; CHEM C242; CHEM C211. Coordination chemistry; structure, theory of bonding, reactivity of transition metal complexes of various coordination numbers. Descriptive chemistry of transition metals of various oxidation states. Organometallic chemistry. Inorganic chemistry in biological systems. Lectures only.

CHEM C348 ***Inorganic Chemistry Laboratory*** (1 credit)
Prerequisite: CHEM C342, previously or concurrently. Syntheses of coordination and organometallic compounds requiring various techniques. Determination of various properties of the compounds prepared at the laboratory bench. Laboratory only.

CHEM C374 ***Macromolecular Synthesis*** (3 credits)
Prerequisite: CHEM C271. Synthesis of proteins, nucleic acids, lipids; synthesis and assembly of complex structures such as membranes, ribosomes, etc. Lectures and problem sessions.
NOTE: Students who have received credit for CHEM C371 or CHEM C372 or CHEM C373 may not take this course for credit.

CHEM C375 ***Intermediary Metabolism*** (3 credits)
Prerequisite: CHEM C271. A survey of selected pathways in intermediary metabolism, including their

regulation and physiological significance: urea cycle, fatty acid oxidation, biosynthesis of nucleosides, tetrapyrroles and carotenoids, cholesterol and steroidal hormones. The biosynthesis of vitamins and cofactors and the metabolism of selected amino acids may also be discussed. Lectures and laboratory.
NOTE: Students who have received credit for CHEM C371 or CHEM C372 or CHEM C373 may not take this course for credit.

CHEM C380 ***Structure of the Chemical Industry*** (2 credits)
Prerequisite: Second-year chemistry students or permission of the Department. Broad outline of major factors to be considered by the chemical industry when contemplating manufacture of a new product or product group. Among the topics that are discussed are: Chemical patents; economic analysis of a process; scale-up of a laboratory reaction to a pilot-plant-size process; using kinetic rate constants to design a chemical process reactor; heat transfer and removal from a large-scale chemical reactor; chemical transport considerations; hazard and pollution considerations; material accounting and mass balances. Lectures only.

CHEM C389 ***Industrial Chemical Laboratory*** (1 credit)
Prerequisite: CHEM C222; CHEM C233; CHEM C380 previously or concurrently; or permission of the Department. A course designed to provide the student with an understanding of the philosophies of industrial quality control, and of industrial research and development. Common industrial techniques will be studied, including laboratory safety; measurement of physical properties; synthetic procedures, both organic and inorganic; and various separation techniques. Several instrumental analytical methods will be employed, and a final report on the work of the term will be submitted. Laboratory only.

CHEM C391 ***Chemical Spectroscopy and Analysis*** (3 credits)
Prerequisite: CHEM C222; CHEM C233. Infrared, ultraviolet, proton magnetic resonance spectroscopies and mass spectrometry will be applied to the elucidation of the structure of organic molecules. Rates and activation energies by PMR. Lectures, problem periods and laboratory.

CHEM C392 ***Introductory Instrumentation*** (3 credits)
Prerequisite: CHEM C211, or two 6-credit BIOL courses with laboratory. Introduction to measurement principles. Instrument design and basic techniques; analysis of amplifiers, integrators, filter circuits, and other basic modules used in chemical instrumentation. In the laboratory, transistor and IC circuits will be studied, as well as some of the mechanical, optical and electrical transducers and recorders used in modern chemical instrumentation. Lectures and laboratory.
NOTE: Students who have received credit for CHEM C390 or CHEM C397 or CHEM C399 may not take this course for credit.

CHEM 398 ***Selected Topics in Chemistry*** (3 credits)

CHEM 399 ***Selected Topics in Chemistry*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

CHEM C419 ***Independent Study and Practicum*** (6 credits)
Prerequisite: Must have a grade of C- (grade point of 1.7 in each course) or better, in 31 credits of the 45-credit Core Programme. Before enrolment in the course, the student must show acceptance by a supervisor and this initial acceptance is subject to later confirmation by the Department. In collaboration with and under the direction of a member of Faculty, the student will carry out independent study and practical work on a problem chosen from the student's area of concentration. The student will submit a written report on the results of the work and the report will be scrutinized by a committee of members of the Department. Independent study and practical work.

CHEM C421 ***Physical Organic Chemistry*** (3 credits)
Prerequisite: CHEM C322 or CHEM C325; CHEM C331. Determination of organic reaction mechanisms using kinetics, activation parameters, acid-base catalysis, Bronsted catalysis law, solvent effects, medium effects, isotope effects, substitutent effects and linear free energy relationships. Lectures only.

CHEM C422 ***Organic Synthesis*** (4 credits)
Prerequisite: CHEM C322 or CHEM C325. Consideration of synthetic strategy and synthesis design. Modern synthetic methods and reagents, exemplified by syntheses of terpenes, alkaloids, pheromones, and novel structures. Lectures and laboratory.

CHEM C442 ***Physical Methods in Inorganic Chemistry*** (3 credits)
Prerequisite: CHEM C341; CHEM C391 previously or concurrently. Introduction to symmetry and the character tables. Diffraction methods, X-ray, ESCA, UV-Visible, ORD and CD, EPR, Moessbauer, NQR, NMR, IR, and Raman. Lectures only.

CHEM C449 ***Laboratory in Synthesis and Techniques in Inorganic Chemistry*** (1 credit)
Prerequisite: CHEM C442, previously or concurrently. Some of the techniques discussed in CHEM C442 will be employed in the laboratory to characterize and determine properties of compounds synthesized at the laboratory bench. Laboratory only.

CHEM C450 ***Research Project and Thesis*** (6 credits)
Prerequisite: 60 credits; enrolment in Honours in Chemistry or permission of the Department. By Departmental decision, such permission will only be given if the student has a grade point average of B- (2.7) or better, for all courses in the Core Programme. The student will work on a research project, in the student's area of concentration, selected in consultation with and conducted under the supervision of a faculty member of the Department; and will write a thesis on the results. The project will also be the subject of a seminar before the Department.
NOTE: Students planning to take this course must consult with the Chemistry Department as early as possible the year before the final year.

CHEM C471 ***Enzyme Kinetics and Mechanism*** (3 credits)
Prerequisite: CHEM C271; 60 credits. Steady-state kinetics, including the use of initial velocity studies and product inhibition to establish a kinetic mechanism; non-steady-state kinetics, isotope effects, energy of activation, etc; detailed mechanisms of selected enzymes. Lectures only.

CHEM C473 ***Medicinal Chemistry I*** (3 credits)
Prerequisite: CHEM C271; 60 credits. Physicochemical principles of drug action. Influence of solubility, surface phenomena, stereochemistry and electronic properties on drug action. Non-specific drugs, anaesthetics, membrane-active disinfectants and antibiotics. Quantitative structure-activity relationships. Receptor theory and models, methods of receptor characterization. Lectures only.

CHEM C474 ***Medicinal Chemistry II*** (3 credits)
Prerequisite: CHEM C473 or permission of the Department. Drugs acting on endogenous messengers and their targets: Cholinergic, adrenergic, dopaminergic and serotoninergic neuronal systems. Histamine, amino acid neurotransmitters. Steroid and peptide hormones, prostaglandins. Enzymes as drug receptors. Drug design. Lectures only.

CHEM C475 ***Pharmacology I*** (3 credits)
Prerequisite: CHEM C271; BIOL C333. Pharmacokinetics, drug metabolism and interaction. Toxicology, carcinogenecity, and teratogenecity. Drug development and testing. Lectures only.

CHEM C476 ***Pharmacology II*** (3 credits)
Prerequisite: CHEM C475 or permission of the Department. Autonomic nervous system pharmacology. Functions of central nervous system, depressants, stimulants. Narcotic analgesics, addiction. Cardiovascular, renal, and endocrine pharmacology. Lectures only.

CHEM C478 ***Hormone Biochemistry*** (3 credits)
Prerequisite: CHEM C271 and third-year standing. This course deals with an in-depth study of the vertebrate hormones and will involve a study of the precise chemical structure and properties of each hormone, its biosynthesis and mode of secretion from the cell. The circulating form of the hormone will be examined, as well as the nature of the hormone receptor. The cellular mechanism of action and the relationship of the hormone's action to the intact animal will be investigated. Lectures only.

CHEM C479 ***Advanced Biochemistry Laboratory*** (3 credits)
Prerequisite: Must have a grade of C- (grade point of 1.7 in each course) or better, in 31 credits of the 45-credit Core Programme. This course deals with the theory and practice of modern biochemical laboratory techniques. Laboratory only.

CHEM C491 ***Advanced Instrumentation*** (4 credits)
Prerequisite: CHEM C392. A study of the amplifiers, transducers, and other circuit elements used to acquire data in chemistry, in the analog, time, and digital data domains. A study of these circuits as regards optimization, frequency response, sampling parameters, signal-to-noise enhancement and budget error analysis. Some of the concepts involved in computer interfacing, for both control and and data collection, will be discussed. In the laboratory, selected experiments will illustrate the topics discussed in lectures. Lectures and laboratory.
NOTE: Students who have received credit for CHEM C490 or CHEM C497 or CHEM C499 may not take this course for credit.

CHEM C492 ***Chemical Spectroscopy*** (4 credits)
Prerequisite: CHEM C321 or CHEM C324; CHEM C391, or CHEM C311; CHEM C316. Theory and application of EPR spectroscopy, rotational spectroscopy, rotation-vibrational spectroscopy, Raman spectroscopy. Lectures and laboratory.

CHEM 498 ***Advanced Topics in Chemistry*** (3 credits)

CHEM 499 ***Advanced Topics in Chemistry*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.060 Classics

Chairman
L. SANDERS, *Associate Professor*

Associate Professors
D. BROWN
S. CASEY
E. PRESTON

Associate Professor of Classics and Linguistics
C.R. BARTON

The Department offers courses in Ancient History, in Ancient Greek and Latin, and in classical literature read in the original or in translation. It also offers courses in classical civilization, Pre-History, and Archaeology.

The Department offers programmes in Classical Philology, Classical Studies and Classical Archaeology. The programme of Classical Philology requires linguistic competence in Ancient Greek and Latin, and is directed towards a comprehensive understanding and appreciation of Ancient History and Literature. The programme of Classical Studies does not require a knowledge of the languages, but is concerned with a broadly based study of ancient society. Students may register for Honours, Specialization, Major, or Minor in Classical Studies; or Honours, Major, or Minor in Classical Philology or Minor in Classical Archaeology. Moreover, all courses in these programmes are open as electives to students in other departments.

Students must consult the Department Chairman to select the courses in their programme. For details on suggested programmes, see the Classics Brochure. Students are advised to consult the timetable for the campus where individual courses will be offered.

Students who already had Honours status by June 1, 1977, continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours or Specialization in Classical Studies

Stage I

15 CLAS C211[3], C212[3], C240[3], C242[3], C243[3]

Stage II

24 Chosen from CLAS C230[3], C231[3], C241[3], C254[6], C257[3], C258[3], C261[3], C262[3], C266[3], C267[3], C268[3], C269[3], C280[6], C290[6]

21 *Chosen from CLAS C323[3], C324[3], C325[3], C326[3], C327[3], C344[6], C345[6], C350[3], C351[3], C352[3], C353[3], C364[3], C365[3], C366[3], C367[3], 399[6], C446[6], C448[6], C449[6], 498[3]

42 BA Major in Classical Studies

Stage I

15 CLAS C211[3], C212[3], C240[3], C242[3], C243[3]

Stage II

18 CLAS C230[3], C231[3], C241[3], C254[6], C257[3], C258[3], C261[3], C262[3], C266[3], C267[3], C268[3], C269[3], C280[6], C290[6]

9 Chosen from CLAS C323[3], C324[3], C325[3], C326[3], C327[3], C344[6], C345[6], C350[3] and C351[3]; C352[3], C353[3], C364[3], C365[3], C366[3], C367[3], 399[6], C446[6], C448[6], C449[6], 498[3]

24 Minor in Classical Studies

6 CLAS C211[3], C212[3]

6 Chosen from CLAS C240[3], C241[3], C242[3]

12 Chosen from CLAS C261[3] and C262[3], C266[3], C267[3], C324[3], C325[3], C326[3], C327[3], C350[3], C351[3]

72 BA Honours in Classical Philology

Stage I

18 CLAS C240[3], C242[3], C280[6], C290[6]

6 Chosen from CLAS C211[3] and C212[3], C326[3], C327[3]

Stages II and III

12 CLAS C380[6] and C390[6]

18 Credits of Latin selected from CLAS C490[6], C491[6], C492[6], C493[6], C494[6], C495[3]

18 Credits of Greek selected from CLAS C480[6], C481[6], C482[6], C483[6], C484[6], C485[6]

42 BA Major in Classical Philology

Stage I

18 CLAS C211[3], C212[3], C280[6], C290[6]

Stage II

18 CLAS C240[3], C242[3], C380[6], C390[6]

Stage III

6 One advanced Latin or Greek course

24 Minor in Classical Philology

24 CLAS credits in either Greek and/or Latin

24 Minor in Classical Archaeology

12 CLAS C266[3], C364[3], C365[3], C366[3]

3 CLAS C267[3] or C367[3]*

9	Chosen, with the approval of the Department, from courses in Classics or Art History, or from field-work courses in Archaeology offered by other institutions

**Students with credits for Art History C338[6] or C339[6] will be permitted to replace CLAS C267[3] or C367[3] with an elective approved by the Department.*

GROUP 1: CLASSICAL STUDIES

A. Literature

CLAS C211 The Beginnings of European Literature (Greek Literature) (3 credits)

CLAS C212 The Beginnings of European Literature (Latin Literature) (3 credits)

CLAS C323 Roman Satire (3 credits)

CLAS C324 Homer and the Epic Hero I (3 credits)

CLAS C325 Homer and the Epic Hero II (3 credits)

CLAS C326 Greek and Roman Drama I (3 credits)

CLAS C327 Greek and Roman Drama II (3 credits)

B. History

CLAS C230 (also given as HIST C219) The Ancient Near East I (3 credits)

CLAS C231 (also given as HIST C221) The Ancient Near East II (3 credits)

CLAS C240 (also given as HIST C223) Greek History I (3 credits)

CLAS C241 (also given as HIST C224) Greek History II (3 credits)

CLAS C242 (also given as HIST C225) Roman History (3 credits)

CLAS C243 (also given as HIST C226) History of the Roman Empire (3 credits)

CLAS C344 Propaganda and Political Deception in Greek and Roman History (6 credits)

CLAS C345 (also given as HIST C324) History of Byzantium, 602-1453 (6 credits)

CLAS C446 Continuity and Change: An Intellectual History of the Late Roman Empire (6 credits)

CLAS C448 Alexander the Great and Julius Caesar (6 credits)

CLAS C449 Human Beginnings: The Stone Ages (6 credits)

C. Culture & Civilization

CLAS C254 Women in Classical Antiquity (6 credits)

CLAS C257 A Comparative Study of Judaic and Greek Traditions I (3 credits)

CLAS C258 A Comparative Study of Judaic and Greek Traditions II (3 credits)

CLAS C261 Introduction to Greek and Roman Mythology (3 credits)

CLAS C262 Myth and Mythmaking (3 credits)

CLAS C350 Greeks and the Afterlife (3 credits)

CLAS C351 Romans and the Afterlife (3 credits)

CLAS C352 Love, Hate and Friendship in the Classical World I (3 credits)

CLAS C353 Love, Hate and Friendship in the Classical World II (3 credits)

D. Archaeology

CLAS C266 An Introduction to Classical Archaeology (3 credits)

CLAS C267 The Archaeology of the Greek Bronze Age (3 credits)

CLAS C268 Meso-American Archaeology (3 credits)

CLAS C269 South American Archaeology (3 credits)

CLAS C364 Classical Greek Art and Archaeology (3 credits)

CLAS C365 Art and Archaeology of the Hellenistic Age (3 credits)

CLAS C366 Etruscan and Roman Republican Art and Archaeology (3 credits)

CLAS C367 Roman Imperial Art and Archaeology (3 credits)

GROUP 2: CLASSICAL PHILOLOGY

A. Classical Greek

CLAS C280 Elementary Classical Greek (6 credits)

CLAS C380 Intermediate Classical Greek (6 credits)

CLAS C480 Greek Historians (6 credits)

CLAS C481 Plato (6 credits)

CLAS C482 Homer (6 credits)

CLAS C483 Greek Tragedians (6 credits)

CLAS C484 Greek Orators (6 credits)

CLAS C485 Greek Comedy (6 credits)

B. Latin

CLAS C290 Elementary Latin (6 credits)

CLAS C390 Intermediate Latin (6 credits)

CLAS C490 Roman Historians (6 credits)

CLAS C491 Cicero (6 credits)

CLAS C492 Roman Poetry I (6 credits)

CLAS C493 Roman Poetry II (6 credits)

CLAS C494 Late Latin (6 credits)

CLAS C495 Roman Comedy (3 credits)

CLAS C496 Roman Satire (3 credits)

GROUP 3: SPECIAL COURSES (EITHER PHILOLOGY OR CLASSICAL STUDIES)

CLAS 299 Selected Topics in Classics (6 credits)

CLAS 399 Selected Topics in Classics (6 credits)

CLAS 498 Advanced Topics in Classics (3 credits)

CLAS 499 Advanced Topics in Classics (6 credits)

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

CLAS C211 ***The Beginnings of European Literature (Greek Literature)*** (3 credits)
The Greek background of European literature. Selections from Homer, the Greek dramatists, Plato, and Aristotle's *Poetics*.

CLAS C212 ***The Beginnings of European Literature (Latin Literature)*** (3 credits)
The Roman background of European literature. Selections from Lucretius, Catullus, Cicero, Virgil, Horace, Ovid, Seneca, and Juvenal.

CLAS C230 ***(also given as HIST C219) The Ancient Near East I*** (3 credits)
A survey of the political, social, economic, and intellectual history of the Ancient Near East, from the Neolithic age to the Indo-European invasions of the early 2nd Millennium, with special emphasis placed upon the problem of the emergence of civilization in Mesopotamia, Egypt, and the Indus valley. Ancient sources utilized wherever possible.

CLAS C231 ***(also given as HIST C221) The Ancient Near East II*** (3 credits)
A survey of the political, social, economic, and intellectual history of the Ancient Near East, from the Indo-European invasion of the early 2nd Millennium to the establishment of the Persian Empire, with special emphasis placed upon the process of diffusion of civilization throughout the Near Eastern World, the creation of Egyptian, Mesopotamian, and Persian imperialism, and the development of Hebrew monotheism. Ancient sources utilized wherever possible.

CLAS C240 ***(also given as HIST C223) Greek History I*** (3 credits)
A political, social, economic, and cultural history of Greece from Minoan-Mycenaean times to the end of Classical Greek civilization in the fourth-century B.C., with special emphasis placed upon fifth-century Athens.

CLAS C241 ***(also given as HIST C224) Greek History II*** (3 credits)
A political, social, economic, and cultural history of the Greek World from Alexander the Great to the Roman conquest of Greece in 146 B.C. Although due attention will be paid to developments within the Hellenistic kingdoms and to the later Greek achievements in art, literature, science, philosophy, and religion, the process of fusion of Hellenism with the Orient—vital for the evolution of Judaism, Christianity, and Islam—will be extensively explored.

CLAS C242 ***(also given as HIST C225) Roman History*** (3 credits)
A political, social, economic, and cultural history of Rome from the City's origins to the establishment of the Roman Empire under the Emperor Augustus.

CLAS C243 ***(also given as HIST C226) History of the Roman Empire*** (3 credits)
A political, social, economic and cultural history of the Roman Empire from Augustus to Justinian the Great. Attention will be paid to the rise of Christianity and the continuity of Roman law and administration in both the eastern and western parts of the Late Roman Empire.
NOTE: Students who have received credit for CLAS C343 (HIST C320) may not take this course for credits.

CLAS C254 ***Women in Classical Antiquity*** (6 credits)
An examination of the social status and political influence of women in ancient Greece and Rome. Particular emphasis will be placed upon the apparent contradiction between the seemingly inferior position occupied by women in fifth-century Athens and the general enlightenment that characterized the epoch. Within this context, the influence of war upon the struggle for feminine emancipation , as seen through the eyes of tragedians, comic writers, philosophers, and historians, will be considered. Due attention will also be paid to the movement for feminine emancipation during the Late Roman Republic and Early Empire.

CLAS C257 ***A Comparative Study of Judaic and Greek Traditions I*** (3 credits)
The end of the First Diaspora; the books of Ezra and Nehemia; differing political, social and intellectual currents in Judea under Persian rule; first links with the Greeks; Alexander legend in Josephus and Talmud; Ptolemaic rule in Palestine; the family of the Tobiads; the Jews of the Fayum; the Jews of Egypt in Ptolemaic times; the books of Ben Sira and Daniel; Development of the Oral Law.
NOTE: Students who have received credit for CLAS C256 may not take this course for credits.

CLAS C258 ***A Comparative Study of Judaic and Greek Traditions II*** (3 credits)
Hellenistic Civilization in Jewish Palestine in the second century B.C.; political developments preceding the accession of Antiochus IV Epiphanes; the Greek cities of Palestine; the Hellenistic reforms; Jerusalem as a Greek City; Antiochus' persecution of Judaism; the Maccabean Wars; Hasmonean Hellenism; Hellenistic Civilization in the Diaspora; Jewish Community and Greek city; Alexandria; Platonic influence upon Philo Judaeus; Hellenistic Antisemitism; Hellenistic Jewish literature; Apocrypha and Pseudepigrapha; cross influences of Judaism and Hellenism as manifested in philosophical and religious writing, symbols, customs and language of the period.
NOTE: Students who have received credit for CLAS C256 may not take this course for credits.

CLAS C261 ***Introduction to Greek and Roman Mythology*** (3 credits)
This course will explore the nature of Classical Mythology and will examine the stories about the gods and the heroes of the Greeks and Romans, as found in their literature and culture.
NOTE: Students who have received credit for CLAS C260 may not take this course for credits.

CLAS C262 ***Myth and Mythmaking*** (3 credits)
An examination of the universal features of myth. Recurrent patterns of myth in Mesopotamian, Egyptian, Greek and Roman mythologies.
NOTE: Students who have received credit for CLAS C260 may not take this course for credits.

CLAS C266 ***An Introduction to Classical Archaeology*** (3 credits)
Archaeology as an art and as a science: towards a definition of archaeology. The history of classical archaeology. Field archaeology today, its tools and techniques: stratigraphy, excavation, and artifact analysis. The relationship of archaeology to Pre-History, History, Fine Arts, and Anthropology.
NOTE: Students who have received credit for CLAS C264/HIST C227 may not take this course for credits.

CLAS C267 ***The Archaeology of the Greek Bronze Age*** (3 credits)
The Bronze Age in Crete and Greece within the context of Near Eastern civilizations. Cnossos, Mycenae, Troy. Presentation classification, dating, and interpretation of selected artifacts.
NOTE: Students who have received credit for CLAS C265/HIST C229 may not take this course for credits.

CLAS C268 ***Meso-American Archaeology*** (3 credits)
An archaeological and anthropological study of the pre-Columbian peoples, cultures, and civilizations of ancient Mexico, Belize, Guatemala, and Honduras: the Olmec "mother culture" Izape, Monte Alban, Tlatilco, and Teotihuacan. The glory and the grandeur of the Maya. Form and iconography in meso-American art. From the Toltecs to the Aztecs. An aesthetic appreciation of pre-Columbian art and architecture. Current excavations, theories, and controversies among Americanists. Some work at the Montreal Museum of Fine Arts.

CLAS C269 ***South American Archaeology*** (3 credits)
An archaeological and anthropological study of the pre-Columbian peoples, cultures, and civilizations of ancient Peru, Columbia, Ecuador, Bolivia, and Chile: the "mother culture" of Chavin de Huantar. Valdivian pottery and stone-age (Jomon) Japan. The great empires of Peru before the Incas: Huari-Tiahuanaco, Chan Chan, and Chimu. Paracas, Nazca, and Mochica art. The "tears of the sun", and the coming of the Incas. Characteristics of Inca civilization. A survey of current excavations and research. Some work at the Montreal Museum of Fine Arts.

CLAS C280 ***Elementary Classical Greek*** (6 credits)
A course for those with no previous knowledge of Greek. Major emphasis will be placed on assisting the student in acquiring a reading command of the language. This course is designed not only for those interested in classical literature but also for students in the departments of History, Philosophy and Theology.

CLAS C290 ***Elementary Latin*** (6 credits)
A course for those with no previous knowledge of Latin. Major emphasis will be placed on assisting the student in acquiring a reading command of the language. Open to all students, but especially to those interested in classical languages, History, Philosophy, and Theology.

CLAS 298 ***Selected Topics in Classics*** (3 credits)

CLAS 299 ***Selected Topics in Classics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

CLAS C323 ***Roman Satire I*** (3 credits)
A study of the satiric genre, its birth and development in Roman literature and its connection with the early novel as seen in the English translations of the works of Horace, Juvenal, Petronius, Persius, Seneca, and Apuleius, with attention to the social climate and historical events of the period.
NOTE: Students who have received credit for CLAS C223 may not take this course for credits.

CLAS C324 ***Homer and the Epic Hero I*** (3 credits)
This course will deal mainly with the *Iliad* of Homer: its form, content, and meaning as an oral epic. Also investigated will be the hero in a warrior society: his privileges, responsibilities, and moral values.
NOTE: Students who have received credit for CLAS C224 may not take this course for credits.

CLAS C325 ***Homer and the Epic Hero II*** (3 credits)
This course will deal mainly with the *Odyssey* of Homer and the *Aeneid* of Virgil. A comparison will also be made with the concept of the hero in ancient and in modern literature.
NOTE: Students who have received credit for CLAS C225 may not take this course for credits.

CLAS C326 ***Greek and Roman Drama I*** (3 credits)
A study of the origins and growth of Attic Tragedy with a close examination of plays of Aeschylus and Sophocles.
NOTE: Students who have received credits for CLAS C220 or C320 may not take this course for credits.

CLAS C327 ***Greek and Roman Drama II*** (3 credits)
Prerequisite: CLAS C326. A continued study of the development of Greek Tragedy as seen in plays of Euripides. The origins and growth of Greek Comedy as seen in plays of Aristophanes and Menander.

The influence of classical Greek drama on the Roman playwrights Plautus, Terence and Seneca and on European drama.
NOTE: Students who have received credit for CLAS C220 and C320 may not take this course for credits.

CLAS C344 ***Propaganda and Political Deception in Greek and Roman History*** (6 credits)
Prerequisite: An Ancient History course. An examination of the relationship between political ideas and practice, with particular emphasis upon the slogans and false ideologies invented to justify war, peace, and the implementation of political and constitutional programmes by both radical and reactionary elements. Though inevitably the chief sources discussed will be literary, due attention will also be directed towards the value of numismatic, epigraphic, and artistic material as a means of winning over the mind of man.

CLAS C345 ***(also given as HIST C324) History of Byzantium, 602-1453*** (6 credits)
A survey of the transformation from the Late Roman Empire into the Byzantine commonwealth, and changes in economic and social conditions. Special attention is given to the reorganization of administrative and military structures, the relationship between Byzantium and its Balkan neighbours, the Arab conquest, and the rising importance of Asia Minor.

CLAS C350 ***Greeks and the Afterlife*** (3 credits)
A study of ideas of immortality as reflected in classical Greek literature. An examination of myths, mystery religions, and schools of philosophical thought. This literary survey will include readings translated from the works of Homer, Hesiod, Sophocles, Euripides, and Plato.
NOTE: Students who have received credit for CLAS C250 may not take this course for credits.

CLAS C351 ***Romans and the Afterlife*** (3 credits)
A study of the growth of early Roman customs connected with the supernatural. Burial practices and tomb paintings of the Etruscans. Popular Roman concepts of the underworld and the influence of Greek myth. The intellectual influence of Greek philosophy on later Roman religious thought as reflected in the works of Cicero and Lucretius. Religion and the patriotic ideal in the Augustan revival, as reflected in Virgil's *Aëneid.*
NOTE: Students who have received credit for CLAS C251 may not take this course for credits.

CLAS C352 ***Love, Hate, and Friendship in the Classical World I*** (3 credits)
The growth and the failure of human relationships were of intimate concern to men and women in the ancient world, as they are today. This course will investigate, in the literature of classical times, the evolving shape of human encounter in terms of three basic emotions: love, hate, and friendship. The theme "love" will be examined as expressed in the *Odyssey* of Homer, and especially in the love poetry of Greece and Rome.
NOTE: Students who have received credit for CLAS C252 may not take this course for credits.

CLAS C353 ***Love, Hate, and Friendship in the Classical World II*** (3 credits)
The theme "hate and revenge" will be seen in its most tragic form in the *Iliad* of Homer, and in the plays of the Greek dramatists. The third theme, "friendship", will be examined in its elemental form in the *Iliad* of Homer, and then in its urbane expression in the works of Plato and Cicero.
NOTE: Students who have received credit for CLAS C253 may not take this course for credits.

CLAS C364 ***Classical Greek Art and Archaeology*** (3 credits)
The art and architecture of the Greek world from 900 to 323 B.C. A study of the geometric, archaic, and classical periods with particular attention to painting (especially ceramics), sculpture, and architecture. The concept of "style" in archaeological dating. The works of Exekias and Douris, of Phidias and Praxiteles, and of Iktinos and Kallikrates as representative of the "ideal" in Classical Greek Art. Some work at the Montreal Museum of Fine Arts.

CLAS C365 ***Art and Archaeology of the Hellenistic Age*** (3 credits)
The art and architecture of the Greek world after the death of Alexander the Great. Hellenistic aestheticism, synthesis of oriental and Greek tradition in the visual arts. Development of motifs of anxiety and eroticism. Impact of Hellenistic art on Rome and Italy.

CLAS C366 ***Etruscan and Roman Republican Art and Archaeology*** (3 credits)
A survey of Neolithic, Bronze, and early Iron Age cultures in Italy: Palafitte and Villanovans. The emergence of Etruscan civilization and the coming of the Greeks. The archaeological reconstruction of the city of Rome in the republican period. Some work at the Montreal Museum of Fine Arts.

CLAS C367 ***Roman Imperial Art and Archaeology*** (3 credits)
Development of Roman art and architecture from Augustus to the late Roman Empire. Roads, fortifications, aqueducts, theatres, porticos, monuments, baths and basilicas. Pompeii and Herculaneum. Special emphasis on Roman Britain. From Roman to Romanesque.

CLAS C380 ***Intermediate Classical Greek*** (6 credits)
Prerequisite: CLAS C280, or equivalent. Further work towards the acquisition of a reading command of the language. Readings from works such as Plato's *Apology* and *Crito,* Xenophon's *Anabasis* and the *New Testament.*

CLAS C390 ***Intermediate Latin*** (6 credits)
Prerequisite: CLAS C290, or equivalent. Further work towards the acquisition of a reading command of the language. Selections from Cicero, Catullus, and Pliny, or Seneca.

CLAS 398 ***Selected Topics in Classics*** (3 credits)

CLAS 399 ***Selected Topics in Classics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

CLAS C446 ***Continuity and Change: An Intellectual History of the Late Roman Empire*** (6 credits)
Prerequisite: One course on the ancient or the medieval world. A study of the main intellectual and social forces in the late Roman Empire that contributed most significantly to the formation of European culture. Among the topics treated will be Neo-Platonism, Gnosticism, the Greek and Roman systems of education, government and private welfare policies, mystery religions, late Judaism, early Christianity, the religious policy of pagan and Christian emperors, contemporary art and architecture.
NOTE: Students who have received credit for CLAS C346 may not take this course for credits.

CLAS C448 ***Alexander the Great and Julius Caesar*** (6 credits)
Prerequisite: An Ancient History course. A course devoted to the careers of two of the most notable and influential figures in Ancient History, seeking to discover them as they were, the worlds which they conquered, their aims, and their achievements.

CLAS C449 ***Human Beginnings: The Stone Ages*** (6 credits)
The origins of man, and man's place in evolution and in nature. Man, the toolmaker: australopithecines, homo habilis, homo erectus, Peking man, Java man, Solo man, and others. The fossil evidence and taxonomic problems. Man, the hunter: meat-eating, intelligence, and sexual differentiation. Territoriality and aggression. The struggle for existence and the survival of the fittest: Darwinism, Marxism, and sociology. Palaeolithic cultures: Abbevillean, Acheulean, Clactonian, and Mousterian. Neanderthal and Cro-Magnon mixtures. Man, the artist. From Perigordian to Magdalenian. Epipalaeolithic and Mesolithic societies. The Neolithic revolution. Stone Age cultures of today. Importance and relevance of prehistory. Homo ludens.

CLAS C480 ***Greek Historians*** (6 credits)
Prerequisite: CLAS C380, or equivalent. Selections from Herodotus, Thucydides, and others.

CLAS C481 ***Plato*** (6 credits)
Prerequisite: CLAS C380, or equivalent. Selections from *The Republic*, and other major dialogues.

CLAS C482 ***Homer*** (6 credits)
Prerequisite: CLAS C380, or equivalent. Extensive readings from the two epics in Greek. Both works will also be studied in their entirety in English.

CLAS C483 ***Greek Tragedians*** (6 credits)
Prerequisite: CLAS C380, or equivalent. Representative dramas from Aeschylus, Sophocles, and Euripides.

CLAS C484 ***Greek Orators*** (6 credits)
Prerequisite: CLAS C380, or equivalent. Selections from Demosthenes, and other Attic orators.

CLAS C485 ***Greek Comedy*** (6 credits)
Prerequisite: CLAS C380, or equivalent. Plays of Aristophanes and Menander.

CLAS C490 ***Roman Historians*** (6 credits)
Prerequisite: CLAS C390, or equivalent. Selections from Sallust, Livy, and Tacitus.

CLAS C491 ***Cicero*** (6 credits)
Prerequisite: CLAS C390, or equivalent. Careful examination of selections from the letters, and the oratorical and philosophical works.

CLAS C492 ***Roman Poetry I*** (6 credits)
Prerequisite: CLAS C390, or equivalent. Selections from Horace and Virgil.

CLAS C493 ***Roman Poetry II*** (6 credits)
Prerequisite: CLAS C390, or equivalent. Selections from Ovid and Lucretius.

CLAS C494 ***Late Latin*** (6 credits)
Prerequisite: CLAS C390, or equivalent. A study of selected texts from the works of patristic and medieval writers. This course is directed especially to students of History, Philosophy, and Theology.

CLAS C495 ***Roman Comedy*** (3 credits)
Prerequisite: CLAS C390, or equivalent. Selections from Plautus and Terence.

CLAS C496 ***Roman Satire II*** (3 credits)
Prerequisite: CLAS C390, or equivalent. Selections from Juvenal, Petronius, Persius, and Seneca.

CLAS 498 ***Advanced Topics in Classics*** (3 credits)

CLAS 499 ***Advanced Topics in Classics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.070 Communication Studies

Acting Chairman
W. GILSDORF, *Associate Professor*

Professors
J. BUELL
M. GERVAIS
M. MALIK
J.E. O'BRIEN

Associate Professors
D. DINIACOPOULOS
W.L. GARDINER
T. KOVATS
B. LEWIS
N. METALLINOS
D. MURPHY
D.J. TADDEO
G. VALASKAKIS

Assistant Professors
M. ALLOR
M. CHARLAND
T. GECSEI
R. HANCOX

Lecturer
H. THWAITES

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

The Department offers two programmes of study, and two others jointly with Journalism.

a) *Bachelor of Arts, Specialization in Communication Studies:* consisting of 60 credits in Communication Studies and 30 credits from electives outside the Department.

b) *Bachelor of Arts, Major in Communication Studies:* consisting of 42 credits in Communication Studies and 48 credits from electives outside the Department.

c) *Bachelor of Arts, Specialization in Communication and Journalism:* consisting of 60 credits in Communication and Journalism courses and 30 credits from electives outside Communication and Journalism.

d) *Bachelor of Arts, Specialization in Broadcast Journalism:* consisting of 60 credits in Communication and Journalism courses and 30 credits from electives outside Communication and Journalism. This programme was first offered in 1981-82.

Elective credits are understood as courses taken in other departments or faculties of the University. Credits in Communication Studies or Journalism, or in Cinema (Faculty of Fine Arts) may not be used in lieu of electives.

200-level courses are normally taken in first year, 300-level courses in second year, 400-level courses in third year.

Written work may be required in English for courses in Journalism; please consult the Department.

60 BA Specialization in Communication Studies

18 COMS C230^3, C240^3, C255^3, C275^3, C278^3, C284^3

6-18 Chosen from courses in Cluster I*

24-36 Chosen from courses in Cluster II-V with at least 3 credits from each Cluster

**No more than one course from Cluster I may be done concurrently.*

42 BA Major in Communication Studies

18 COMS C230^3, C240^3, C255^3, C275^3, C278^3, C284^3

6-12 Chosen from courses in Cluster I*

12-18 Chosen from courses in Cluster II-V with at least 3 credits from each Cluster

**No more than one course from Cluster I may be done concurrently.*

60 BA Specialization in Communication and Journalism

NOTE: Students must meet the admission requirements of both the Department of Communication Studies and the Journalism Programme. This programme is designed to prepare graduates for the English-language media.

Stage I

9 JOUR C201^6, COMS C240^3

6 Chosen from COMS C275^3, C278^3, C284^3

Stage II

12 JOUR C302^3, C303^3, C310^3, C400^3

3 Chosen from JOUR C402^3, C404^3, C415^3

Stage III

9 *Other Journalism credits - these may not be laboratory/workshop courses*

21 *Chosen from Communication clusters I, III, IV, V, with a maximum of 6 credits from Cluster I*

60 **BA Specialization in Broadcast Journalism**

NOTE: Students must meet the admission requirements of both the Department of Communication Studies and the Journalism programme. This programme is designed to prepare graduates for the English-language media.

Stage I

15 JOUR C201[6], COMS C240[3], C278[3], C284[3]

3 Chosen from JOUR C205[3], C210[3], C215[3]

Stage II

9 JOUR C302[3], C306[3], C310[3]

6 Chosen from COMS C378[6], C381[6], C387[6]

3 JOUR C343[3]

Stage III

9 JOUR C415[3], C420[3], C446[3]

15 Chosen from Communication clusters III, IV, and V

Department Objectives

The Department of Communication Studies was founded in 1965 (as Communication Arts), the first at a Canadian university.

The Department's programmes are generalist in nature and take a *broad approach* to the study of media and communication in today's world. Of primary concern is a humanistic understanding, a value-oriented appreciation of the role of mass media in society. Programmes intend to develop the student's critical judgment and creative potential by both theoretical and practical work.

Each of the Department's programmes has three basic components: 1) a humanities and liberal arts emphasis; 2) a social-science and research emphasis; 3) a creative laboratory-experience emphasis.

Graduates of the Department's programmes have found careers in: 1) Radio, Television, Broadcast Journalism; 2) Film, other media industries, media departments of business; 3) Small media firms and free-lance media work; 4) Educational institutions (teaching, A/V services); 5) Advertising, Public Relations, Promotion, Marketing, Sales, Information, etc.; 6) Advanced studies and research; 7) Other professions, and government services.

Facilities

The Department has two television studios equipped with colour videocassette recording and editing facilities, two 3/4" colour video portapak units, 9 x 16mm film units, 16mm sync and editing units, and complete super 8mm film units; photographic laboratories; a holographic and laser laboratory; multiple sound facilities; a research studio for the measurement of visual and audio-information loads, an electronic and electro-mechanical programmer for multi-media use; and a Learning Centre with audio-slide film-video terminals for independent study.

Department Admission Requirements

The number of students that can be accommodated every year in our department is physically limited by the room available in labs, the amount of equipment and the number of professors. Approximately 120 students are admitted every year, giving a student population of about 300 in the three years of our undergraduate programme. Applications consistently outnumber the department's capacity. For this reason, the Department of Communication Studies has a distinct admission procedure, in addition to the normal admission process of Concordia University.

The Department is prepared to receive applications as early as October, and to arrange interviews, for the following academic year. Interested candidates should obtain information about admission requirements of Communication Studies by contacting the Admissions Committee, Department of Communication Studies, Loyola Campus, Concordia University, 7141 Sherbrooke Street West, Montreal, Quebec. H4B 1R6. Telephone: (514) 848-2555.

Diploma in Communication Studies

The Department also offers a one-year diploma programme for students who have completed their undergraduate degree in another field. For requirements pertaining to the Diploma, please refer to the Graduate Calendar or contact the Department.

CLUSTERS:

I. Laboratory

COMS C275 Visual Dynamics I (3 credits)

COMS C278 Seminar and Practicum in Sound I (3 credits)

COMS C284 Seminar and Practicum in Film and Video I (3 credits)

COMS C374 Visual Dynamics II (6 credits)

COMS C375 Visual Dynamics III (6 credits)

COMS C378 Seminar and Practicum in Sound II (6 credits)

COMS C381 Seminar and Practicum in Film II (6 credits)

COMS C387 Seminar and Practicum in Television II (6 credits)

COMS C475 Visual Dynamics IV (6 credits)

COMS C478 Seminar and Practicum in Sound III (6 credits)

COMS C481 Seminar and Practicum in Film III (6 credits)

COMS C487 Seminar and Practicum in Television III (6 credits)

COMS C490 Communication Programming (6 credits)

II. Seminar/Practicum

COMS C230 Basic Writing for the Media (3 credits)

COMS C255 Communication Analysis of Environment (3 credits)

COMS C305 Advanced Script -Writing for Film (6 credits)

COMS C330 Advanced Script-Writing for Television (6 credits)

COMS C351 Biocybernetic Research (6 credits)

COMS C355 Media Computer Applications I (3 credits)

COMS C356 Media Computer Applications II (3 credits)

COMS C470 Advertising and the Consumer Society (3 credits)

COMS C471 Public Relations: Principles and Problems (3 credits)

III. Media Study

COMS C306 Documentary Film (3 credits)

COMS C307 Hollywood in the Silent Era (3 credits)

COMS C308 The German Expressionist Movement (3 credits)

COMS C309 The Revolutionary Soviet Cinema (3 credits)

COMS C310 The Hollywood Genres (3 credits)

COMS C311 The Classic French Cinema (3 credits)

COMS C312 La Nouvelle Vague (3 credits)

COMS C313 Ingmar Bergman and The Scandinavians (3 credits)

COMS C314 The Italians, from Neo-Realism to Today (3 credits)

COMS C315 Shakespeare in the Cinema (3 credits)

COMS C316 The Canadian Cinema (3 credits)

COMS C317 Film Studies (3 credits)

COMS C320 Media Styles, Modes, and Carriers (3 credits)

COMS C321 History of Media Carriers (3 credits)

COMS C331 Documentary Television (3 credits)

COMS C416 Film Criticism (3 credits)

COMS C417 Film Ideas (3 credits)

COMS C435 Documentary Film and Television Genres I (3 credits)

COMS C436 Documentary Film and Television Genres II (3 credits)

IV. Media and Society

COMS C352 Broadcast Policy in Canada (3 credits)

COMS C360 Mass Communication (3 credits)

COMS C361 Seminar in Propaganda (3 credits)

COMS C437 Seminar in Media Forecast (3 credits)

COMS C444 Television Aesthetics I (3 credits)

COMS C445 Television Aesthetics II (3 credits)

COMS C454 Communication Law and Administration I (3 credits)

COMS C455 Communication Law and Administration II (3 credits)

COMS C460 Political Communication (3 credits)

COMS C461 Organizational Communication (3 credits)

COMS C468 Theoretical Issues in Development Communications (3 credits)

COMS C469 Media Applications to Participatory Development (3 credits)

V. Communication and Media Theory

COMS C240 Communication Theory (3 credits)

COMS C322 Media and Media Culture (3 credits)

COMS C323 Media Theory (3 credits)

COMS C362 Psychology of Communication (3 credits)

COMS C364 Communications and the Canadian North (3 credits)

COMS C366 Interpersonal Communication and Cultural Context (3 credits)

COMS C367 Media and Cultural Context (3 credits)

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

COMS C230 ***Basic Writing for the Media*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. This course is designed to provide knowledge of and practice in the special written forms and formats utilized by the media. Assignments are practically oriented toward possible student productions.

COMS C240 ***Communication Theory*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Through lectures, discussions, and selected readings from the works of key theoreticians, this course introduces students to major approaches to the understanding of the process of communication.

COMS C255 ***Communication Analysis of Environment*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. General and detailed analysis of various information complexes; e.g., museums, galleries, exhibitions, countrysides, landscapes, city streets, highways, department stores, churches, etc., from the point of information values used to influence future prospective audiences of films, television programmes, or exhibition and theatre visitors. The basic values of light, space, sound, picture, words, and exhibit structures will be explored through individual student projects in real locations. Students will work on individual projects under the supervision of the directing professor. Tutorial course.

COMS C275 ***Visual Dynamics I*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. In this course, students are led to discover fundamental laws which underlie visual representation. The overall method consists of basic experiments in vision and perception: to explore distances, planes, tones, colour, light, etc. Photography is the medium by which these experiments are recorded for observation and discussion. Lectures and Laboratory: average 6 hours per week.
NOTE: Students are required to bear some of the cost of materials.

COMS C278 ***Seminar and Practicum in Sound I*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. This course is designed to provide the student with a basic working knowledge of audio systems both natural and electronic, to understand the various affective and psychological qualities of sound, and how sound may be structured into imaginative aural forms. Lectures and Laboratory: average 6 hours per week.
NOTE: Students are required to bear some of the cost of materials.

COMS C284 ***Seminar and Practicum in Film and Video I*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. A practical approach to an understanding of the common elements of film and video media, and of the specific differences

inherent in their effective use. Course methodology includes lectures, screenings, readings, portapak video and Super 8mm film productions. Lectures and Laboratory: average 6 hours per week. *NOTE: Students are required to bear some of the costs of materials.*

COMS 298 ***Selected Topics in Communication Studies*** (3 credits)

COMS 299 ***Selected Topics in Communication Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

COMS C305 ***Advanced Script-Writing for Film*** (6 credits)
Prerequisite: Registration in a Communication Studies programme; submission of a qualifying assignment by July 1st and subsequent approval of instructor. This assignment, which varies from year to year, is intended to test the student's writing ability and creative imagination. A practical course in writing film-drama: story construction and plotting, scene-making, characterization and character development, dialogue, dramatic continuity, timing, pacing, rhythm, suspense, and creative criticality. Many of these fictional and dramatic techniques will, as the occasion arises, be applied to non-fictional scripts as well. The method consists of lecture, discussion, demonstration, critique. Assignments are on-going.

COMS C306 ***Documentary Film*** (3 credits)
Prerequisite: Open to all University students with at least second-year standing, with permission of the Department. A survey of the documentary film field from 1895 until today, with an examination of major styles (Romantic, Realistic, Expressionistic, Avant-Garde, etc.) in the works of significant documentary filmmakers. The method consists of lecture, screenings, critique, and discussion.
NOTE: COMS C307 through C316 are offered on a three-year cycle.

COMS C307 ***Hollywood in the Silent Era*** (3 credits)
Prerequisite: 30 credits. In-depth study of the 60-year career of Chaplin, with special emphasis on the great early comics (Keaton, etc.); Hollywood and the birth of the movies: D.W.Griffith, von Stroheim.

COMS C308 ***The German Expressionist Movement*** (3 credits)
Prerequisite: 30 credits. Lang, Murnau, Pabst, etc., in Germany, and in their later Hollywood careers. The German cinema of the '20's; the Expressionists. Integration with the socio-cultural climate of the pre-Hitler days.

COMS C309 ***The Revolutionary Soviet Cinema*** (3 credits)
Prerequisite: 30 credits. The Soviet Formalists of the '20's: Eisenstein, Pudovkin, Dovzenko. Film and revolution; Marxist aesthetics. The later evolution of the Soviet cinema.

COMS C310 ***The Hollywood Genres*** (3 credits)
Prerequisite: 30 credits. Concentration on specific genres and directors of Hollywood in its golden era ('30's, '40's). The aesthetics of art and the mass audience.

COMS C311 ***The Classic French Cinema*** (3 credits)
Prerequisite: 30 credits. Before the Nouvelle Vague, the great French cinema of Renoir, Clair, Ophuls, Cocteau.

COMS C312 ***La Nouvelle Vague*** (3 credits)
Prerequisite: 30 credits. Truffaut, Godard, Chabrol, Resnais, etc., from their New-Wave days to the present. Bresson. The new cinema: consciousness, ideology, art.

COMS C313 ***Ingmar Bergman and the Scandinavians*** (3 credits)
Prerequisite: 30 credits. In-depth study of Bergman. The entire context, from the great silent period (Sjostrom, Stiller, etc.) to today (Widerberg, etc.).

COMS C314 ***The Italians, from Neo-Realism to Today*** (3 credits)
Prerequisite: 30 credits. The neo-realist movement; Rossellini, De Sica, Visconti, Fellini, Antonioni, Pasolini, Bertolucci, Wertmuller.

COMS C315 ***Shakespeare in the Cinema*** (3 credits)
Prerequisite: 30 credits. *Hamlet, Macbeth, Othello,* etc., as seen in the works of Welles, Olivier, the Russians. A study of the plays and their cinematic expressions: Shakespeare's world via cinema.

COMS C316 ***The Canadian Cinema*** (3 credits)
Prerequisite: 30 credits. The aesthetic, economic, sociopolitico-cultural dimensions of feature films in Canada. Course conducted in collaboration with Canadian film directors, producers, actors, critics.

COMS C317 ***Film Studies*** (3 credits)
Prerequisite: 60 credits; permission of the Department. A student may repeat one of the foregoing courses (C307 to C316), provided that the content is different, by registering for credit under COMS C317.

Communication Studies students may take no more than 6 credits from Cinema and Photography courses of the Faculty of Fine Arts.

COMS C320 ***Media Styles, Modes, and Carriers*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Selected segments from the history of painting, architecture, drama, music, related to their possible use in media productions, and to the contemporary philosophy of communication. Readings and viewings of major styles, artworks, and authors in a self-instructional, programmed course.

COMS C321 ***History of Media Carriers*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Selected segments from the history of photography, cinematography, radio, and television, media design related to the possible use in media productions, and to the contemporary philosophy of communication. Readings and viewings of major styles, artworks, and authors in a self-instructional, programmed course.

COMS C322 ***Media and Media Culture*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Media and their impact on people and society, in order of historical appearance: literacy, printing, the still photograph, cinema, radio, television. The growth of the technologies of work, movement, education, thought, and social organization. The problems of man in a technological environment.
NOTE: Students who have received credit for COMS C304 may not take this course for credit.

COMS C323 ***Media Theory*** (3 credits)
Prerequisite: COMS C322. Analysis of the historical and current evidence in an attempt to understand what media are, what they do of themselves, their common characteristics, cumulative patterns and necessary effects. Are there inherent "laws" of media? Emphasis is on the intellectual faculty as manifested in society's response to media.
NOTE: Students who have received credit for COMS C304 may not take this course for credit.

COMS C330 ***Advanced Script-Writing for Television*** (6 credits)
Prerequisite: Registration in a Communication Studies programme; submission of a qualifying assignment by July 1 and subsequent approval of instructor. This assignment, which varies from year to year, is intended to test the student's writing ability and creative imagination. Anatomy of script; audio-visual components and functions; TV drama, comedy, documentary, docu-drama. The creative process: plot development, character and dialogue; uses of tension, conflict, "tricks of the trade"; professional attitude and discipline vis-a-vis the market. Lectures, demonstrations, group discussions, and script projects.

COMS C331 ***Documentary Television*** (3 credits)
Prerequisite: Open to all University students with at least second-year standing, with permisssion of the Department. A survey of the documentary television field from its beginning until today, with an examination of characteristic styles and forms (informative, biographical, current events, compilative, etc.). The method consists of lecture, video example, critique, and discussions.

COMS C351 ***Biocybernetic Research*** (6 credits)
Prerequisite: COMS C255 and permission of the Department. An examination of the aids for information-impact measurements, demonstrated on communication media carriers. Testing will be conducted on information complexes previously analyzed; e.g., photographs, advertisements, film segments, television programme sequences, exhibitions, urban environments, and open-country landscapes. The main emphasis of learning is on the methodology of tests, diagnoses, and interpretations of results for practical media productions. A biometrical and biotelemetrical approach is used for testing. Each student will work on individual projects during the year. Tutorial course.
NOTE: Students who have received credit for COMS C350 may not take this course for credit.

COMS C352 ***Broadcasting Policy in Canada*** (3 credits)
Prerequisite: 30 credits; permission of the Department. This course acquaints the student with the historical development of broadcasting and broadcasting legislation in Canada. It covers the present state of broadcasting policy in Canada, its goals and problems, and explores alternative solutions.
NOTE: Students who have received credit for COMS C467 may not take this course for credit.

COMS C355 ***Media Computer Applications I*** (3 credits)
Prerequisite: COMS C275; COMS C278; COMS C284. Concepts and practical techniques for the production of computer-generated colour video graphics and graphic text layouts; analog and digital representation, transmission, storage and processing of visual and aural information. Lectures and laboratory.
NOTE: Students are required to bear some of the cost of materials.

COMS C356 ***Media Computer Applications II*** (3 credits)
Prerequisite: COMS C355. More advanced concepts and techniques for the production of computer-generated colour video graphics; simple computer-generated sound; information input/retrieval networks, including videotex systems. Lectures and laboratory.
NOTE: Students are required to bear some of the cost of materials.

COMS C360 ***Mass Communication*** (3 credits)
The course will examine the nature and forms of Mass Communication, the social sources and uses of Mass Communication, its psychology, audiences, and effects. The ethics of Mass Communication

will also be discussed. Through guest lecturers from the various media and readings of contemporary analyses/critiques, issues such as media ownership and access, government and self-regulation, technological implications, media accountability, etc., will be raised.

COMS C361 ***Seminar in Propaganda*** (3 credits)
Prerequisite: 30 credits. The aim of this course is to recognize the orchestration of the elements of propaganda in media, and to develop the means to deal with it. Course methodology includes lectures, discussions, and projects.

COMS C362 ***Psychology of Communication*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. The objectives of the course are to provide the learner with: 1) an overview of psychological processes active in the communicative act; 2) the opportunity to explore a single media area in depth, either independently or in a small group. Through a variety of formats, topic areas such as the following are explored: perception and information processing, language development, areas of para-psychology related to communication, influences on attitude/behaviour, verbal/non-verbal codes, meaning, etc.

COMS C364 ***Communication and the Canadian North*** (3 credits)
Prerequisite: Open to all University students with at least second-year standing, with permission of the Department. The course examines the historical context of Eskimo-White interaction in the Arctic; the role that media technology has played in Northern development and social change; the current research and experimental approaches to communication problems in the Canadian North.

COMS C366 ***Interpersonal Communication and Cultural Context*** (3 credits)
Prerequisite: 30 credits; permission of the Department. This course examines the relationship between value orientations, social perception, self-concept, identity and other culturally-determined phenomena, as well as verbal and non-verbal communication processes. It draws upon theory and research on communication between members of different cultures and sub-cultures.
NOTE: Students who have received credit for COMS C363 may not take this course for credit.

COMS C367 ***Media and Cultural Context*** (3 credits)
Prerequisite: 30 credits; permission of the Department. This course examines the ways in which different cultures express themselves using print, film, radio and television; the cultural content of media messages; the role of mass communication across cultural boundaries, as well as media representation of, and access by, cultural groups. The course will utilize screenings and case studies.
NOTE: Students who have received credit for COMS C363 may not take this course for credit.

COMS C374 ***Visual Dynamics II*** (6 credits)
Prerequisite: COMS C275, and permission of the Department. This course involves both theory and fieldwork in photographing man-made environments; e.g., the city, using natural light. The student will acquire an understanding of the problems of distance and direction by means of lectures, critiques of fieldwork, and individual consultation.
NOTE: Students are required to possess certain recommended equipment and to bear some of the costs of materials.

COMS C375 ***Visual Dynamics III*** (6 credits)
Prerequisite: COMS C374, and permission of the Department. A study of the development of visual artifacts and media in the search for an increasingly adequate mimesis of persons, situations, and meanings. The course comprises both the practical and the theoretical aspects of the visual image, historically and currently, and examines the assumptions underlying the quest for the auto-communicative image. Lectures and Laboratory: average, 6 hours per week.
NOTE:Students are required to bear some of the cost of materials.

COMS C378 ***Seminar and Practicum in Sound II*** (6 credits)
Prerequisite: COMS C230 and COMS C278. This course gives the student a knowledge of the basic disciplines necessary for constructing aural message forms from the simplest to the most complex; also, experience in the various technologies required to apply these aural forms to radio, film, television, etc. Students will prepare, produce, and direct, individually and in teams, a number of projects. Lectures and Laboratory: average, 6 hours per week.
NOTE: Students are required to bear some of the cost of materials.

COMS C381 ***Seminar and Practicum in Film II*** (6 credits)
Prerequisite: Above-average standing in COMS C284 and permission of the Department. This course involves an examination of the communicative process through the medium of film. Areas covered include scripting, directing, and shooting, with both silent and sync-sound equipment. Productions are designed to test the students' theoretical knowledge and give practical experience in the craft of film-making. Lectures and Laboratory: average, 6 hours per week.
NOTE: Students are required to bear some of the cost of materials.

COMS C387 ***Seminar and Practicum in Television II*** (6 credits)
Prerequisite: COMS C284 and permission of the Department. A study of the components related to the creation of the television documentary and short-feature programme in terms of the theoretical possibilities inherent in the medium. Student productions in the two genres, from idea-stage through completed videotape, constitute the laboratory section of the course. Lectures and Laboratory: average, 6 hours per week.
NOTE: Students are required to bear some of the cost of materials.

COMS 398 ***Selected Topics in Communication Studies*** (3 credits)

COMS 399 ***Selected Topics in Communication Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

COMS C416 ***Film Criticism*** (3 credits)
Prerequisite: 60 credits; permission of the Department. An introduction to the assumptions, methodologies and vocabularies implicit in important schools of popular and academic film criticism.

COMS C417 ***Film Ideas*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Seminar using film criticism to focus on aesthetic/cultural dimension of present trend-setting films, and to explore students' sensibility in context of contemporary culture. Methodology includes viewings, discussions, written critiques, critical/aesthetic readings.

COMS C435 ***Documentary Film and Television Genres I*** (3 credits)
Prerequisite: 30 credits in Communication Studies. Survey of genres in documentary film and television such as: biographical, industrial, travelogue, nature, scientific, training, educational, children's films and TV programmes. Examples from Canada, USA, Europe.

COMS C436 ***Documentary Film and Television Genres II*** (3 credits)
Prerequisite: COMS C435. An in-depth study of one of the film and television genres surveyed in COMS C435. Tutorial course.

COMS C437 ***Seminar in Media Forecast*** (3 credits)
Prerequisite: 60 credits. This course examines trends in film, sound, television, and other media for future applications. The course includes theory of media effects. Representatives from industry and government are invited to discuss future trends in media utilization. The course demands a theoretical and practical model for original or novel use of a medium or media mix.

COMS C444 ***Television Aesthetics I*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Television in contemporary culture is examined critically as an art form, not simply as a transmission device. Aspects of television aesthetics in the Canadian experience are highlighted. Extensive individual viewing and analysis in the Department's Learning Centre.

COMS C445 ***Television Aesthetics II*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. A continuation of COMS C444 for students who have done superior work and who wish to research particular genres or a particular television series in depth. Tutorial. Assignments include critical reviews, an oral report and a written paper.

COMS C454 ***Communication Law and Administration I*** (3 credits)
Prerequisite: 30 credits; enrolment in a Communication Studies programme. The course focusses upon the legal and business aspects of the communications industry. Among the items covered are basic contract law, torts or delicts, libel and slander and copyright laws. The legal relationships between the various parties involved in the field of communications, e.g., producer and writer, will also be analyzed.

COMS C455 ***Communication Law and Administration II*** (3 credits)
Prerequisite: COMS C454. Studies of particular cases are chosen to illustrate specific problems and their resolutions. In-depth treatment is given to applications of areas developed in COMS C454.

COMS C460 ***Political Communication*** (3 credits)
Prerequisite: Permission of the Department. The relationships between media institutions and political institutions, both in Canada and internationally are examined. Issues such as: the flow of political information; the social and political construction of news; the politics of regulation; the politics of influence in campaigns, nation-building socialization through media; ideology in the media, and alternatives to traditional media are explored.
NOTE: Students who have received credit for COMS C465 may not take this course for credit.

COMS C461 ***Organizational Communication*** (3 credits)
Prerequisite: Permission of the Department. The flow of communication within organizational and institutional structures is examined. Topics such as: communication function; patterns and networks; directionality; overload and underload; communication roles and expectations; and processes of organizing are explored. Discussion and field study are combined with readings for an emphasis on applied theory.
NOTE: Students who have received credit for COMS C465 may not take this course for credit.

COMS C462 ***Communication, Culture, and Popular Art*** (3 credits)
Prerequisite: 60 credits; permission of the Department. An introduction to the social analysis of works of popular art. Cultural products such as television programmes, hit records, and popular novels are examined through techniques of textual analysis. Within the context of an examination of cultural

theories, the course focusses on (1) critical methods based in the theory of rhetoric and (2) theories of mass culture and alienation.

COMS C468 ***Theoretical Issues in Development Communications*** (3 credits)
Prerequisite: 60 credits; permission of the Department. This seminar examines historical and current research on, and theoretical approaches to, the role media can play in indigenous and international development.
NOTE: Students who have received credit for COMS C466 may not take this course for credit.

COMS C469 ***Media Applications to Participatory Development*** (3 credits)
Prerequisite: 60 credits; permission of the Department. This seminar examines the impact and usefulness of appropriate media (film, television, community radio, interactive satellites, etc.) to indigenous and international development.
NOTE: Students who have received credit for COMS C466 may not take this course for credit.

COMS C470 ***Advertising and the Consumer Society*** (3 credits)
Prerequisite: Permission of the Department; priority will be given to students in Communication Studies programmes. Advertising as an economic force is examined from a mass-media focus. Communication strategies are analyzed. A promotional campaign is prepared and presented as a team project.

COMS C471 ***Public Relations: Principles and Problems*** (3 credits)
Prerequisite: Permission of the Department; priority will be given to students in Communication Studies programmes. This course considers the principles and responsibilities of Public Relations, and critically examines specific P.R. problems and the choice of media in effecting solutions.

COMS C475 ***Visual Dynamics IV*** (6 credits)
Prerequisite: COMS C375, and permission of the Department. Developing the visual imagination: conceiving and organizing ideas for expression through media, such as Print, Film, Television. Each student will be asked to conceive a 'story' (an integrated narrative), and to determine its most appropriate visual presentation (emphasizing the story's significance and maintaining overall unity). Three presentational modes will be considered: a) the controlled sequence; b) the randomly perceived message; c) the pictorial symbol. Lectures and Laboratory: average, 6 hours per week.
NOTE: Students are required to bear some of the cost of materials

COMS C478 ***Seminar and Practicum in Sound III*** (6 credits)
Prerequisite: COMS C378 and permission of the Department. Conceptual and practical study of the temporal and spatial structure of synthetic sound. Control of the fine and coarse structure of the volume, pitch and timbre of synthesized sound. Lectures and production projects are designed to give the student a broad acquaintance with the current concepts and techniques in electronic sound production. Lectures and laboratory.
NOTE: Students are required to bear some of the cost of materials.

COMS C481 ***Seminar and Practicum in Film III*** (6 credits)
Prerequisite: Above-average standing in COMS C381 and permission of the Department. An advanced course in film theory and communication. Film-making processes covered will include scripting, directing, "A and B roll" editing, and shooting with crystal sync-sound equipment. Lectures and Laboratory: average, 6 hours per week.
NOTE: Students are required to bear some of the cost of materials.

COMS C487 ***Seminar and Practicum in Television III*** (6 credits)
Prerequisite: Above-average standing in COMS C387, and approval of the Department. An advanced course in television theory and communication. Possible options, depending on the ability of the students in any one year, include the dramatic documentary and the complete adaptation for television of professional plays. Lectures and Laboratory: average, 6 hours per week.
NOTE: Students are required to bear some of the cost of materials.

COMS C490 ***Communication Programming*** (6 credits)
Prerequisite: COMS C255; COMS C351. This course studies the interaction among several media, e.g., film, sound, television, static 2D and 3D image. Special attention is given to application in the areas of displays, exhibitions, entertainment endeavours, multi-media shows, where more than one medium is used in one coherent programme.

COMS C496 ***Honours Project I*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Towards the end of their second year, students enrolled in a Communication Studies programme who have demonstrated scholarly and creative ability may be selected for major research or production in a communications area of special interest. During the third year, individually or in teams, the project is realized in close collaboration with Faculty directors.
NOTE: Students who have received credit for COMS C495 may not take this course for credit.

COMS C497 ***Honours Project II*** (3 credits)
Prerequisite: Open only to students in Communication Studies programmes. Students who have received credit for COMS C496 may register for COMS C497.

COMS 498 ***Advanced Topics in Communication Studies*** (3 credits)

COMS 499 ***Advanced Topics in Communication Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.080 Economics

Chairman
B.S. SAHNI, *Associate Professor*

Professors
J. AHMAD
M. ARMSTRONG
F. HAYES
J.W. O'BRIEN

Associate Professors
S. AHSAN
S. ALAM
S. ALVI
A. ANASTASOPOULOS
J. BRESLAW
P. CALLIER
I. IRVINE
M.N. ISLAM
A. LALLIER
Z.R. LIU
F. MULLER
D. OTCHERE
D. SHAPIRO
E. SIGGEL
W.B. SIMS
M. STELCNER
A. TAKAHASHI

Assistant Professors
M. ALTMAN
B. COZIER
M. KEIL
L. PEPALL

Lecturers
M. ABRAR
M. HINTON
I. LAXER
G. LO
E. McDONNELL

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

60 BA Honours in Economics
6 *ECON C201[3], C203[3]
12 ECON C301[3], C302[3], C303[3], C304[3]
6 ECON C325[3], C326[3]
6 **ECON C221[3] and C222[3] or QUAN C243[3] and C244[3]
12 Chosen from ECON C401[3], C403[3], C408[6], C421[3], C422[3], C425[3], C426[3], C432[3], C435[3], C442[3], C443[3]
6 Chosen from 400-level ECON courses
12 ECON elective credits

60 BA Specialization in Economics
6 *ECON C201[3], C203[3]
12 ECON C301[3], C302[3], C303[3], C304[3]
6 ECON C325[3] and C326[3]
6 **ECON C221[3] and C222[3] or QUAN C243[3] and C244[3]
18 Chosen from 400-level ECON courses
12 ECON elective credits

42 BA Major in Economics
6 *ECON C201[3], C203[3]
6 **ECON C221[3] and C222[3] or QUAN C243[3] and C244[3]
12 ECON C301[3], C302[3], C303[3], C304[3]
6 Chosen from 400-level ECON courses
12 ECON elective credits

30 Minor in Economics
6 *ECON C201[3], C203[3]
12 ECON C301[3], C302[3], C303[3], C304[3]
12 ECON elective credits

**Students exempted from ECON C201 and/or C203 are required to replace these courses with ECON electives.*

***Any equivalent 6 credits satisfy this component of the programme. See note after ECON C222.*

Students who already had Honours status by June 1, 1977, will continue to be governed by the requirements which applied at the date of their admission to the Honours Programme.

The courses in Economics listed below are acceptable as Science credits in the Bachelor of Science degree.

ECONOMICS C222[3], C325[3], C326[3], C421[3], C422[3], C425[3], C426[3]

ECONOMICS CO-OPERATIVE PROGRAMME

Director
M. ARMSTRONG, *Professor*

The Economics Co-Operative Programme is offered to students who are enrolled in the B.A. Honours or Specialization in Economics.

Students in Economics Co-Op take the regular academic programme. The schedule of academic and work periods for an entering group of Economics Co-Op students is given in §31.510.

The overseeing of the Economics Co-Op Programme is the responsibility of the Director of the Economics Co-Operative programme and the departmental Co-Op Committee, which provides the connecting link between students, employers and the Centre for Co-Operative Education.

Students interested in applying for Economics Co-Op should refer to §31.510 where a

full description of the admission requirements is provided or write to The Director, Centre for Co-Operative Education, 7308 Sherbrooke Street West, Montreal, Quebec, H4B 1R6. For information by telephone see "CONTACTS" in §31.510.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ECON C200 ***Introductory Economics*** (6 credits)
This course is primarily for students not majoring in Economics. Its content is essentially the same as that of ECON C201 and C203. However, there is greater emphasis on Canadian economic institutions and government policies. It is open to all students except those in Commerce, and does not count as credit towards any Economics programme.

ECON C201 ***Introduction to Microeconomics*** (3 credits)
Introduction to the functioning of the market system; concepts of supply and demand, the role of prices in resource allocation; production decisions by firms. Analysis of differences between competition and monopoly, and the implications for economic efficiency; theories of labour markets and wage determination.

ECON C203 ***Introduction to Macroeconomics*** (3 credits)
An introductory analysis of aggregate economic activity. The focus is on the principles of determination of the level of employment, national income, real output, inflation, and international balance of payments. The course also analyzes the principles which govern trade relations among countries. These topics are integrated by a discussion of government monetary and fiscal policies to stabilize economic activity.

ECON C221 ***Statistical Methods I*** (3 credits)
Prerequisite: CEGEP Mathematics 201, or equivalent. Elementary probability, permutations and combinations, binomial and normal distribution. Analysis and organization of statistical data. Tests of hypotheses. Confidence limits. Introduction into linear regression and correlation. *NOTE See §200.7*
NOTE: Credits will be given for only one 6-credit course or two 3-credit courses from ECON C221 and C222, MATH C207 and C241, QUAN C243 and C244, SOCI C210, PSYC C317 and C318.

ECON C222 ***Statistical Methods II*** (3 credits)
Prerequisite: ECON C221, or equivalent. The course is an introduction to the application of statistical techniques to economic data. Topics discussed will include, among others, time series, statistical inference, analysis of variance, correlation and regression. *NOTE See §200.7*
NOTE: Credits will be given for only one 6-credit course or two 3-credit courses from ECON C221 and C222, MATH C207 and C241, QUAN C243 and C244, SOCI C210, PSYC C317 and C318.

ECON C250 ***Introduction to Economic History*** (6 credits)
A study of the economic development of western societies. Particular attention will be paid to Europe during the period from the sixteenth century to the present day. The aim of the course is to provide an understanding of the interconnections among social, economic, and political change.

ECON 298 ***Selected Topics in Economics*** (3 credits)

ECON 299 ***Selected Topics in Economics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ECON C301 ***Intermediate Microeconomic Theory I*** (3 credits)
Prerequisite: ECON C201; ECON C203. Theory and measurement of demand, theory of consumer behaviour, production, theory of the firm, and cost analysis.

ECON C302 ***Intermediate Microeconomic Theory II*** (3 credits)
Prerequisite: ECON C301. Market structure (perfect competition, monopoly, oligopoly), industrial concentration, factor markets, income distribution, economic efficiency, general equilibrium, welfare economics.

ECON C303 ***Intermediate Macroeconomic Theory I*** (3 credits)
Prerequisite: ECON C201; ECON C203. An analysis of the major areas of aggregate economics. Topics will include the definition and measurement of regional income and the theory of income determination in the classical and in the Keynesian systems.

ECON C304 ***Intermediate Macroeconomic Theory II*** (3 credits)
Prerequisite: ECON C303. Topics will include review of the complete Keynesian system, business cycles, economic fluctuations in Canada, inflation and unemployment theories, macroeconomic policies, economic growth, and their theory and application to Canada.

ECON C311 ***Economic Development I*** (3 credits)
Prerequisite: ECON C201; ECON C203. The course investigates comparative economic development,

with special attention to problems of capital formation, population growth, quality of labour force, and social and cultural attitudes towards economic modernization. Theories of economic development are evaluated in the context of the realities of historical patterns and the varying degrees of ability to achieve modernization.

ECON C312 ***Economic Development II*** (3 credits)
Prerequisite: ECON C311. The concept and meaning of economic planning, methodology and strategy of planning, input-output and sector analysis, techniques of planning, investment criteria and priorities, study and appraisal of economic plans of a few countries.

ECON C315 ***The Economic Development of Quebec*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course will review past and present trends in the economic development of Quebec. Emphasis will be placed on the economic growth of Quebec since the Second World War. Attention will be given to the regional aspects of Quebec's growth problems.

ECON C316 ***Canadian Economic Issues I*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course will be devoted to an analysis of some economic issues facing Canada; for example, employment and unemployment, inflation, economic growth and potential, income distribution, social-security policies, monetary and fiscal policies.

ECON C317 ***Canadian Economic Issues II*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course is similar to ECON C316, but will cover a different group of topics; for example, foreign ownership and control, regional-development problems, monopoly and competition, government regulation of business, agricultural policy, trade policy.

ECON C323 ***The Use of Economic Data*** (3 credits)
Prerequisite: ECON C201; ECON C203. The objective of this course is to familiarize the student with the techniques of obtaining, manipulating and analyzing economic data with computers. Particular emphasis is given to SPSS, TSP and to CANSIM. The student should be prepared to devote at least 10 hours/week to this course. Provision is made for weekly tutorials.
NOTE: Registration is limited to those who are in the Honours, Specialization or Major programmes in Economics.

ECON C325 ***Mathematics for Economists I*** (3 credits)
Prerequisite: ECON C201; ECON C203; MATH C201, or equivalent. This course introduces the student to differential and integral calculus and to their applications in economic analysis. Topics covered include set theory, the concept of limits and rules for differentiation and integration. It also deals with the relevance of these concepts and techniques to economic problems such as maximization, equilibrium analysis, and dynamic adjustments.

ECON C326 ***Mathematics for Economists II*** (3 credits)
Prerequisite: ECON C325. The main emphasis is on the study of linear algebra and its application to the solution of economic models consisting of a system of linear simultaneous equations. Topics covered include: matrices and vectors; basic properties of determinants and their use in solving equations pertaining to economic problems, such as linear programming and constrained optimization.

ECON C331 ***Money and Banking*** (3 credits)
Prerequisite: ECON C201; ECON C203. Overview of a monetary economy: nature, forms and the economic role of money. Monetary standards: markets, prices, and the value of money; the payments system; financial markets. Determinants of size and distribution of wealth portfolios. Supply of money: measure, composition, and size determination. The economic role of commercial banks and non-bank financial intermediaries. Central banking and monetary policy. The international monetary system. (Topics will be covered within the Canadian banking institutional framework.)

ECON C335 ***Economics of the Public Sector I*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course examines government fiscal activity within the context of a free-market system. Rationale for public-sector activity is reviewed in terms of economic efficiency conditions and the market failures. Among the topics covered in the course are growth of public spending, the concept of public good externalities, collective decision-making process, pure theory of public expenditures, local expenditures analysis, and efficiency in public spending, with special reference to Quebec and Canada.

ECON C336 ***Economics of the Public Sector II*** (3 credits)
Prerequisite: ECON C201; ECON C203. The principal purpose of this course is to examine and evaluate the important elements of the Canadian fiscal structure, emphasizing taxation and the financing of public expenditures. Among others, issues in taxation of income, both at the individual and corporate levels, excise and sales taxation, taxation of capital gains and wealth, intergovernmental fiscal relations, and tax reform will be taken up.

ECON C341 ***International Economic Relations*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course focuses on the discussion and the analysis of the major forms of economic relations among nations; viz., international trade and international capital movements. Emphasis is placed on policies and institutions for the smooth functioning of the international economy, although some theoretical constructs are also introduced. Topics covered

include international trade, protection, balance of payments, economic integration, and international monetary system.

ECON C351 ***Economic History of Canada*** (6 credits)
Prerequisite: ECON C201; ECON C203. This course is designed to introduce the student to Canadian economic development from the early period of settlement to the present day. Emphasis will be placed on the economic history of Canada since Confederation.

ECON C352 ***Economic History of the U.S.A.*** (6 credits)
Prerequisite: ECON C201; ECON C203. American economic history will be presented from the viewpoint of the "new" economic history. This is a topical approach in which formal economics is used to evaluate traditional historical material. Among the topics which will be covered are: the economic consequences of slavery, the American business cycle, the development of American central banking, the merger movements, the causes of the American "take-off", and the economic causes and consequences of the major wars.

ECON C353 ***Economic History of Europe*** (6 credits)
Prerequisite: ECON C201; ECON C203. The course will explore the causes and consequences of the British Industrial Revolution and its diffusion to the Continent, in terms of differential national-growth patterns, and social problems associated with economic change. It will include an analysis of free trade, economic nationalism, the new imperialism, the importance of the crisis of 1929, in terms of economic organization, thought, and policy. Post-World War II reorganization, in terms of planning the welfare state, and economic integration.

ECON C361 ***Industrial Organization*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course develops the relationship of the firm to various forms of market structure. The course will focus on the objectives of the corporation, corporate interdependence, and the government control of industry. A study of policy matters will centre on anti-trust and corporate regulation, with respect to both the legislative and economic aspects.

ECON C362 ***Economics of the Firm*** (3 credits)
Prerequisite: ECON C201; ECON C222 or QUAN C244. This course stresses the application of economic principles and methodologies to the decision making process of the firm, with an emphasis on the role of risk and uncertainty. Topics will include decision-making criteria, demand analysis and estimation, cost analysis and estimation, pricing theory under various market structures, applied topics in pricing, and the impact of government on the firm. This course is primarily of interest to Commerce students, but is open to others as well.

ECON C370 ***Comparative Economic Systems*** (6 credits)
Prerequisite: ECON C201; ECON C203. A comparative study of contemporary economic systems. While mainly concerned with the institutional features of contemporary free-market economics, the course will also deal with their counterparts, the systems of a command economy, and a Socialist market economy. Of primary interest will be the institutions, mechanisms, and policies which govern allocation, efficiency, growth, and distribution of income, with emphasis on the historical background of the institutions and the social, political, and ideological influences which continue to shape them.

ECON C374 ***Theory and Practice of Cooperation*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course will deal with the effect of cooperatives on economic and social development, with emphasis on Quebec and Canada. Among the topics discussed are the origins and development of the cooperative economy, differences among cooperative, capitalist, and communist economic systems; economic, social, educational, and moral transformations taking place under cooperative influence, and the role of cooperation on the international political scene.

ECON C375 ***The Soviet Economy*** (3 credits)
Prerequisite: ECON C201; ECON C203. The evolution of the Soviet economic system and the policy measures adopted to deal with the problems of establishing and consolidating a socialist state. Special attention is given to Lenin's role in the early phase of the Soviet system, and early economic measures, such as the collectivization of farms. Other topics covered are: the nature of economic planning and progress under Stalin, and the important recent reforms and modifications of the Soviet system under the impact of Liberman's proposals.

ECON C377 ***The Chinese Economy*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course is devoted to an analysis of Chinese economic development since 1949. Topics include: performance and efficiency, strategy for development, agricultural organization, the contribution of policy to economic growth, the industrial sector, control and allocation of resources, national economic planning.

ECON C381 ***Labour Economics I*** (3 credits)
Prerequisite: ECON C201; ECON C203. The general objective of this course is to acquaint the student with various theoretical and empirical issues in the area of labour economics. Particular emphasis is placed upon the relation between theoretical frameworks and their empirical counterparts in Canada. Topics include the theory of wage determination, the effects of minimum wages, human capital theory, the economics of discrimination, and the economics of the household.

ECON C382 ***Industrial Relations I*** (3 credits)
Prerequisite: ECON C201; ECON C203. A study of the general and practical problems that arise in the labour field, such as collective bargaining, the legal framework for the settlement of industrial disputes, the weapons of industrial conflict; the labour movement; contemporary labour issues, such as automation, cost-push inflation, and structural employment.

ECON C383 ***Industrial Relations II*** (3 credits)
Prerequisite: ECON C382. Topics in industrial relations, with particular emphasis on developments in Canada.

ECON C386 ***Economics of Human Resources*** (3 credits)
Prerequisite: ECON C201; ECON C203. A study of recent contributions by economists to the understanding of and solution to social problems which society currently faces in the areas of crime, health, education, and welfare. In addition, specific federal and provincial governmental policies in these areas are analyzed with the standard tools of economics.

ECON C387 ***Labour Law*** (6 credits)
Prerequisite: ECON C201; ECON C203. The development of the trade union movement and early labour legislation in the U.S.A. and Canada; collective bargaining; labour law in Canada and Quebec today, with emphasis on the Industrial Relations and Disputes Investigations Act (Canada), the Quebec Labour Code, and related statutes. An in-depth study of employer's free speech; evocation in matters of arbitration awards; injunctions; successor rights. Practice and procedure before the courts, and labour relations boards and commissions.

ECON C391 ***Economics of the Environment*** (3 credits)
Prerequisite: ECON C201; ECON C203. The subject of this course is environmental quality. It proceeds through an analysis of the relationships among the natural environment, economics, and institutions. The objective is to depict the problem of environmental quality as an economic problem whose solution demands major changes in economic, political, and legal institutions. Attention is also given to policies of collective environmental actions in which the effective management of common property resources will be discussed. The course concludes with a discussion of some broader issues, such as the consistency of improved environmental quality with continued economic and population growth.

ECON C392 ***Urban Economics*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course will focus on the basic issues of economic growth and stagnation, urban land use, the problems of the urban public economy, and special urban problems, such as transportation, congestion, poverty, housing, and urban renewal, and zoning.

ECON C396 ***Natural Resource Economics*** (3 credits)
Prerequisite: ECON C201; ECON C203. This course focuses on the problems of the finiteness of the natural resources base in Canada and in the world, and on an analysis of the demand for and supply of natural resources and energy. The course also discusses the economic aspects of a selected group of conservation measures (financial incentives, reallocation of property rights, regulation).

ECON C397 ***Economics of Discrimination*** (3 credits)
Prerequisite: ECON C201; ECON C203. The purpose of this course is to examine some economic issues of discrimination, with particular reference to women in a Canadian context. Among the topics so examined are: techniques for measuring discrimination and poverty, review of empirical studies, traditional and radical approaches to the study of discrimination, and policies to combat discrimination and poverty.

ECON 398 ***Selected Topics in Economics*** (3 credits)

ECON 399 ***Selected Topics in Economics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ECON C401 ***Advanced Microeconomic Theory*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C325; ECON C326. Selected topics in microeconomic analysis, including: methodology, general equilibrium analysis, welfare economics; theory of the firm, factor pricing, and income distribution capital theory. Primarily for Majors, Specialization, and Honours students.

ECON C403 ***Advanced Macroeconomic Theory*** (3 credits)
Prerequisite: ECON C303; ECON C304; C325; ECON C326. Selected topics in macroeconomic analysis, including construction of models of the economy encompassing the labour, product, and financial markets; the role of monetary and fiscal policies; classical, Keynesian, and post-Keynesian models. Primarily for Majors, Specialization, and Honours students.

ECON C405 ***Welfare Theory*** (3 credits)
Prerequisite: ECON C301; ECON C302; C303; ECON C304. This is an advanced course, intended primarily for Honours students. The course will be devoted to an examination of selected topics in contemporary welfare economics and its applications.

ECON C408 ***History of Economic Thought*** (6 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304. This course traces the development of economic analysis from the time of the Scholastics to modern times. It also includes a description of the prevailing economic, social, and cultural environment in which economists have written. Primarily for Majors, Specialization, and Honours students.

ECON C411 ***Quantitative Development I*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C325; ECON C326. Methods of national accounting and input-output analysis for under-developed countries. Methods of comparing standards of living. Patterns of economic development. Appraisal of models constructed on the premises of modern theories of economic development.

ECON C412 ***Quantitative Development II*** (3 credits)
Prerequisite: ECON C411. The model of economic policy. Planning in stages. The model of linear-activity analysis and efficient decentralization of economic decisions. Planning of efficient accumulation of capital. Individual project evaluation. Foreign-aid and debt-service models. Projection of manpower requirements. Evaluation of empirical applications of optimum planning to under-developed economies.

ECON C413 ***Economic Growth and Fluctuations*** (3 credits)
Prerequisite: ECON C303; ECON C304. A review of some theories of causes of economic fluctuations. Discussion of the economic climate and of stabilization policies

ECON C421 ***Econometrics I*** (3 credits)
Prerequisite: ECON C221; ECON C222; ECON C325; ECON C326. This course develops the simple and multiple classical regression models. The problems of misspecified structures, multicollinearity, and forecasting will also be presented.

ECON C422 ***Econometrics II*** (3 credits)
Prerequisite: ECON C421. This course is a continuation of ECON C421. It deals with the problems of random-error correlation, stochastic regressors, and the stimulation and the estimation of multiple-equation models.

ECON C425 ***Mathematical Economics I*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304; ECON C325; ECON C326. A set-theoretic approach to the theory of demand and production. Special topics in the application of static optimization.

ECON C426 ***Mathematical Economics II*** (3 credits)
Prerequisite: ECON C425. Optimization over time: theory and applications to problems of consumption and investment planning, growth, and capital accumulation. Differential equations.

ECON C428 ***Optimization Techniques*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304; ECON C325; ECON C326. This is an advanced course for Honours students, and for Specialization and Majors students with the consent of the Department. Topics include linear programming and input-output analysis; basic concepts and solutions of linear programming, its application to optimum resources allocation; exposition of basic inter-industry theory within the framework of input-output techniques; its applications to structural analysis.
NOTE: Only 3 credits will be awarded from ECON C428 and QUAN C416.

ECON C432 ***Advanced Monetary Theory*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304, or permission of the Department. The nature of the monetarist-Keynesian controversy and critical appraisal of the IS-LM-AS model. Special topics; theory and evidence of term structure of interest rates, post-Keynesian demand for and supply of money in aggregative and dis-aggregative economic models. Theory of macro-economic policy. Transmission mechanisms, policy coordination, lags, international constraints, and other problems.

ECON C435 ***Advanced Public Finance*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304; ECON C335; ECON C336. In this course, several key areas in Public Finance will be dealt with in depth. Topics covered will be selected from the following: public goods and externalities, cost-benefit analysis, pricing policy of public enterprises, structure of commodity taxation, structure of income taxation, issues in tax reform, and intergovernmental fiscal relations.

ECON C442 ***International Economics: Trade Theory*** (3 credits)
Prerequisite: ECON C301; ECON C302. The basis of international trade, gains from trade, factor-price equalization, the tariff, Canadian commercial policy, trade and development, economic integration.

ECON C443 ***International Economics: Finance*** (3 credits)
Prerequisite: ECON C303; ECON C304. International monetary economics, foreign exchange markets, adjustment mechanisms, capital flows, balance of payments and domestic policy goals, international liquidity.

ECON C450 ***Advanced Economic History*** (3 credits)
Prerequisite: ECON C221; ECON C222; ECON C301; ECON C302; ECON C303; ECON C304. Advanced topics in economic history, with emphasis on the application of economic theory to specific historical questions.

ECON C461 ***Industrial Economics*** (3 credits)
Prerequisite: ECON C221; ECON C222; ECON C301; ECON C302. This course analyzes the structure, conduct, and performance of Canadian and U.S. industries. Topics include the determinants of industrial structure, such as economies of scale and barriers to entry, measures of conduct and performance, technological change, advertising, mergers, integration, and public policy.

ECON C462 ***The Corporate Economy*** (3 credits)
Prerequisite: ECON C221; ECON C222; ECON C301; ECON C303 or FINA C314; FINA C315. This course will examine the nature of the large firm, its behaviour and its impact on the national and international economy. Topics will include: the emergence and historical development of the corporate firm; the separation of ownership from control; the large firm in Canada; theories of the large firm; mergers; macro-economic effects of large firms (administered pricing-inflation); the multinational corporation (theories, evidence, and effects).

ECON C473 ***Economics of Socialism*** (3 credits)
Prerequisite: ECON C301; ECON C302. This course analyzes the theoretical aspects of various types of socialist economies: market, centrally planned, and worker-managed. Definitions and models of the various forms will be developed and compared with a capitalist model and with existing socialist economies such as those of Cuba, China, Yugoslavia, and the U.S.S.R.

ECON C476 ***Marxist Economics*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304 or ECON C370, or permission of the Department. A general survey of Marxist theory, including historical and dialectical materialism. Marx's microeconomics: labour theory of value and its classical predecessors; theory of exploitation and the Iron Law of Wages; transformation problem and price theory. Marx's macroeconomics: business cycles and the theory of capitalist development; crises and the breakdown of capitalism. Contemporary Marxism and the question of the withering away of the state.

ECON C481 ***Labour Economics II*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304; ECON C381. Advanced topics in labour economics with special emphasis on labour-market problems and policies in Canada. Topics include the theory of work-leisure choice, mobility and immigration, unemployment and unfilled vacancies, income distribution, labour market information and the wage-price relationship.

ECON C490 ***Economics of Social Welfare*** (6 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304. This course will be devoted to an examination of the economic aspects of social welfare issues in Canada. Topics include: employment and unemployment; manpower problems and policies, inequality, poverty, social insurance and social assistance; investment in man, especially education and health; urban and regional development; environmental economics; federal, provincial, and municipal policies.

ECON C493 ***Regional Economics*** (3 credits)
Prerequisite: ECON C301; ECON C302; ECON C303; ECON C304. This course introduces the student to the methods and techniques of regional economic analysis, and their application to the problems of regional economies within Canada. Among the microeconomic topics covered are: the location behaviour of firms and households, and the factors determining the allocation of land among alternative competing uses. Macroeconomic topics include: the measurement and analysis of regional income and growth levels, cyclical changes in those levels, and interregional differences in growth rates. Policy problems pertinent to Canadian regions are stressed throughout the course.

ECON C495 ***Economics of Transportation and Communications*** (3 credits)
Prerequisite: ECON C301; ECON C302. Congestion problems and solutions, pricing, costs, demand, and regulation in transportation. Some applications to communications.

ECON 498 ***Advanced Topics in Economics*** (3 credits)

ECON 499 ***Advanced Topics in Economics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.090 Education

Chairman
W. KNITTER, *Associate Professor*

Professors
J.K. BHATNAGAR
G. BOYD
G.O. COLDEVIN
H. ENTWISTLE
P.D. MITCHELL
P. SIMON

Research Professor
G. PASK

Associate Professors
P. ABRAMI
J. BAGGALEY
J. BARAKETT
L.J. BARON
R.M. BERNARD
D.J. DICKS
M. FARRELL
G. FIDLER
F.P. FRIEDMAND
A. HAMALIAN
E. JACOBS
R.F. SCHMID
R. SMITH
F. STEVENS

Visiting Associate Professor
D. BECKWITH

Research Associate
M. TOVAR

Assistant Professor
J. VAZQUEZ-ABAD

Lecturers
C. GIBSON
S. WEINBERG

(For Adult Education, see §31.090.1)

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

30 Minor in Education

30 Chosen from EDUC C201[6], C210[6], C230[3], C305[3], C306[3], C317[3], C321[3], C390[3], C392[3], C405[3], C406[3], C407[3], C413[3], C414[3], C415[3], C416[3], C417[3], C421[6], C426[3], C427[3], C428[3], C429[3], C441[6], C442[3], C490[3], C491[3], 498[3]

***78 BA Specialization in Early Childhood Education**

This programme is open to full-time students. Only practising professionals in the field of education may apply as part-time students.

57 EDUC C210[6], C211[3], C260[3], C262[3], C270[3], C271[3], C371[3], C380[3], C382[3], C386[3], C387[3], C388[3], C445[3], C461[6], C472[3], C473[3], C474[3]

6 Chosen from ARTE C201[3], DINE C201[3], MINE C301[3], EXCI C215[3] or C251[3] in consultation with the Early Childhood Programme Director

6 Chosen from EDUC C413[3], C414[3], C416[3], C417[3] in consultation with the Early Childhood Programme Director

6 Chosen from EDUC C421[6], C426[3], C427[3], C428[3], C429[3], C441[6] in consultation with the Early Childhood Programme Director

3 Chosen from EDUC C383[3], C384[3], C385[3] in consultation with the Early Childhood Programme Director

**NOTE 1: This programme is open to full-time students. In addition to the application submitted to the University, Specialization applicants must complete a form which may be obtained from the Early Childhood Secretary. Only practising professionals in the field of education may apply as part-time students.*

NOTE 2: Upon successful completion of the BA Specialization in Early Chilhood Education programme and application to the Registrar's Services Department, students may be recommended to the Quebec Teachers Certification Service for a Quebec Teaching Permit (Probation), for prekindergarten, kindergarten and Grades 1-3.

To be recommended for certification students must:

1. achieve at least a B (75%) grade in each of the following courses: EDUC C270, C271, C371, C472, C473, C474; and

2. achieve at least a C (65%) grade in each of the following courses: EDUC C380, C382, C383, C384, C385, C386, C387, and C388.

Students who obtain a failing grade or a passing grade that is below the level required for recommendation for certification will be placed on conditional standing within the programme and will be so informed in writing by the Chairman of the Department of Education. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see calendar §16.3.8.)

In order to remain in the degree programme, students who fail to repeat the course successfully within one year are required to acknowledge in writing that they have forfeited the right to be recommended for certification.

In the event that a student meets regular University standards but does not satisfy the

requirements for recommendation for certification, the student may apply to receive the University degree but will not be recommended to the Ministry.

The provisions of this policy also apply to the Certificate in Education programme. In EDUC C471, at least a B (75%) grade is required for such recommendation, in EDUC C480 and C481 at least a C (65%) grade.

45 **BA Major in Child Studies**

18 EDUC C210[6], C211[3], C260[3], C262[3], C371[3]

9 Chosen from EDUC C317[3], C405[3], C413[3], C414[3], C416[3], C417[3] in consultation with the Director of Child Studies

9 Chosen from EDUC C230[3], C380[3], C382[3], C383[3], C384[3], C385[3], C386[3], C387[3], C388[3], C392[3], C421[6], C426[3], C427[3], C441[6], C461[6], C490[3], C491[3] in consultation with the Director of Child Studies

3 Credits chosen from PSYC C220-C227 and PSYC C280 with permission of the Director of Child Studies.

6 Chosen from ARTE C201[3], C202[3]; DINE C201[3], C202[3]; MINE C301[3]; ENGL C237[6], C238[3], C239[3]; EXCI C215[3]; SOCI C272[6], C373[3]; BIOL C203[3]

*CERTIFICATE IN EDUCATION

The Department of Education offers a 30-credit programme leading to the Concordia University Certificate in Education and certification from the Provincial Department of Education.

NOTE: This programme is restricted to individuals at present employed in a recognized educational institution in Quebec and holding a provisional teaching authorization.

Admission Requirements

1. Evidence of full-time employment with a recognized institution in Quebec.
2. Possession of a Quebec Provisional Teaching Authorization.

Admission limited.

Courses

EDUC C201[6]
EDUC C210[6]
either EDUC C480[3], C481[3], or an equivalent course in teaching methodology
EDUC C445[3]
EDUC C471[6]
6 additional undergraduate credits in Education chosen in consultation with the Director of the Programme.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

NOTE:

1. The student must meet the minimum scholarity requirements set by the Provincial government before being recommended for certification. See the conditions for certification following the BA Specialization in Early Childhood Education, above.

2. This programme is not open to teachers of vocational subjects or elementary teachers.

For other programmes which may be of particular interest to teachers, see §22.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

EDUC C201 ***The Nature and Function of Teaching*** (6 credits)
An introduction to the purpose, theories, and methods of teaching.

EDUC C210 ***Psychology of Education*** (6 credits)
This course will introduce the student to a broad range of content in educational psychology, including its scope and methods, learning motivation, growth and development, adjustment, individual differences, guidance, and concept of self.

EDUC C211 ***Child Growth and Development*** (3 credits)
Prerequisite: Enrolment in Early Childhood Education Specialization or Major in Child Studies, or permission of the Early Childhood Education Director. Students will study the physical, cognitive, affective, and social development of the young child. Genetic and environmental factors that influence development will be examined. The implications of developmental needs in terms of planning environments will be covered.

EDUC C230 ***Introduction to Philosophy of Education*** (3 credits)
This course will introduce the student to the content and form of several major educational theories, and to conceptual and logical procedures of philosophizing about education, with particular reference to teaching and learning.

EDUC C260 ***A Survey of Early Childhood Education*** (3 credits)
Prerequisite: Enrolment in Early Childhood Education Specialization, or Major in Child Studies, or permission of the Early Childhood Education Director. This course provides an introduction to the field of early childhood education. The history and philosophy of pre-schools, day care, and the nursery school movement will be presented. The influences of major writers, such as Rousseau, Froebel, Pestalozzi, Itard, Seguin, Montessori, and Dewey will be examined. Comparative pre-school educational practices in other countries will be explored.

EDUC C262 ***The Family and the Child*** (3 credits)
Prerequisite: Enrolment in Early Childhood Education Specialization, or Major in Child Studies, or permission of the Early Childhood Education Director. Students will study various dimensions of the child-parent-school interaction process. Parental understanding of and empathy for the child will be discussed. Family attitudes, feelings, values, expectations, and their impact on the child will be examined. Changes in familial living styles resulting from societal changes will be explored. Students will study and practise methods to facilitate and improve school-parent communications.

EDUC C264 ***Parenthood Study*** (3 credits)
Prerequisite: Enrolment in Early Childhood Education Specialization or Major in Child Studies or permission of the Early Childhood Education Director. This course will focus on the role of parents in the development of the young child. Topical issues concerning teacher-parent-child relationships will be examined. Students will be required to attend a weekly laboratory session in order to observe a parent discussion group and to attend a weekly seminar.

EDUC C270 ***Practicum I: Curriculum, Classroom Management, and Micro-Teaching*** (3 credits)
Prerequisite: Enrolment in Early Childhood Education Specialization. Students will study curriculum development and classroom management at the pre-school level. Teaching skills will be modelled and practised in microteaching sessions. Students will plan and develop activities, lessons, and units, which they will implement in the microteaching sessions. Videotapes of performance will be reviewed and discussed.

EDUC C271 ***Practicum II: Pre-School Field Experiences*** (3 credits)
Prerequisite: Enrolment in Early Childhood Education Specialization. This course requires students to spend one day a week for one semester in the Concordia Child Care Centre, or other pre-school setting. Students will be required to observe, record, and assess the behaviour of young children, to study programme organization and general classroom functioning. Each student will develop a curriculum unit which will be taught. Students must attend a weekly seminar given by the Director, Concordia Child Care Centre.

EDUC 298 ***Selected Topics in Education*** (3 credits)

EDUC 299 ***Selected Topics in Education*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

EDUC C305 ***Technology for Educational Change I*** (3 credits)
This course introduces one aspect of current innovation in schools, the use of computers. Topics covered will include the implications of the integration of computers into schools and research on the interaction of children with microcomputers. Emphasis will be placed upon the preparation of lessons with a computer language specifically designed for children, LOGO (Turtle Graphics). This course requires laboratory work outside class.

EDUC C306 ***Technology for Educational Change II*** (3 credits)
Prerequisite: EDUC C305. This course continues the study of educational computing started in EDUC C305. Two new types of computer languages are introduced: an all-purpose programming language (such as BASIC) and an authoring language (such as PILOT). Techniques for using these languages in the systematic design of instructional units, particularly for micro-computers, will be introduced. Finally, methods for evaluating instructional software will be presented. This course requires laboratory work outside class.

EDUC C317 ***The Urban Child*** (3 credits)
This course concentrates upon the life of the inner-city child and the concomitant influences upon his development in and out of the classroom. Students are instructed in how to view the urban area from the child's perspective, through field assignments in inner-city schools or recreation centres. Lectures by social workers, police officers of the youth section, legal aid counsellors, and inner-city teachers heighten the awareness of students to the environment in which the inner-city child lives.

EDUC C321 ***Sex Role Socialization in the School*** (3 credits)
This course will focus upon how children at the elementary- and secondary-school level are socialized for different work roles, and how work segregation has occurred on the basis of this process. The role of schools and curriculum, then, will be examined in relation to cultural changes in social roles.

EDUC C324 ***Patterns of Educational Culture*** (3 credits)
This course is an introduction to the variety of cultural settings in which formal schooling and informal education socialization take place. The cultural milieu of education, both inside the classroom and outside, in the family, the neighbourhood, the market-place, and the political arena is the focus of readings and lectures.
The aim of this course is to immerse the student in the concepts of anthropology and education in the broadest sense. It is hoped that students will become sensitized to the concept of culture, cultural assimilation, enculturation, socialization, informal, non-formal, and formal educational systems, open and closed societies, and cross-cultural comparison.

EDUC C371 ***Practicum III: Classroom Interaction Dynamics*** (3 credits)
Prerequisite: Second-year standing in Early Childhood Education programmes. This course is designed to encourage both systematic and anthropological observation of children in large and small groups in the classroom. Interaction between child/teacher, children/teacher, and children/children will be studied. Models of interaction will be examined, and verbal as well as non-verbal communication will be covered. The purpose of this course is to develop more effective teaching. The implications of classroom grouping, as well as individual interactions in teaching styles and techniques will be discussed. Videotapes, classroom observation, and participation will be employed.

EDUC C380 ***Language Arts in Early Childhood Education*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. The aim of this course is to give the early childhood educator the skills to develop a stimulating and appropriate language arts programme for the classroom. The language arts curriculum, resource materials and teaching methodologies for the preschool and primary child will be studied. The course will focus on listening, speaking, reading and writing, with special emphasis on integrating language arts activities into all subject areas.

EDUC C382 ***Teaching Science Concepts to Young Children*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. This course will examine areas of science which are relevant to the young child and will emphasize the development of the spirit of scientific enquiry. Resource materials, teaching methodology and classroom activities for early childhood education (preschool and primary) will be examined and evaluated. Assignments will emphasize developing activities for classroom use.

EDUC C383 ***Promoting Moral and Spiritual Attitudes and Values in Young Children*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. This course is designed to introduce the early childhood teacher to the various issues involving the development of moral judgment and reasoning in the young child. Cultural, social, cognitive and emotional factors influencing the growth of morality will be discussed. The major focus will be on examining methods and techniques to enhance the personal development of positive social behaviours (i.e. helping, sharing, caring, etc.) in preschool and primary level children.

EDUC C384 ***Exploring the Human Sciences with the Preschool and Primary Age Child*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. This course will examine the teaching of the human sciences to young children.

EDUC C385 ***Teaching a Second Language to a Young Child*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. This course is designed to give teachers a background in current theories of language acquisition and second language learning. Teaching methodologies such as immersion, enrichment, core/complementary curricula will be studied and resource materials will be examined and evaluated. Assignments will include the development of appropriate classroom activities for young children.

EDUC C386 ***Teaching Reading to Preschool and Primary Children*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. This course deals with the teaching of reading skills to children up to grade 3. Students will be introduced to various approaches used in the teaching of reading. They will examine and evaluate several reading programmes. Special emphasis will be placed on classroom organization; resources for individualizing reading instruction and methods to evaluate reading performance.

EDUC C387 ***Teaching Mathematics to Preschool and Primary Children I*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. This course and the following course (EDUC C388) are designed to provide teachers of young children with background mathematical knowledge and teaching competencies necessary for the development of an exciting and creative mathematical programme for preschool and primary children.
This course will concentrate on the number aspects of the preschool and primary mathematical curriculum. The use of manipulative aids in instructing the young child will be explored and illustrated. Students will be expected to become familiar with relevant resource materials and assignments will emphasize developing activities for classroom use.

EDUC C388 ***Teaching Mathematics to Preschool and Primary Children II*** (3 credits)
Prerequisite: Second-year standing in Early Childhood programmes or permission of the Early Childhood Director. This course and the preceding course (EDUC C387) are designed to provide teachers of young children with background mathematical knowledge and teaching competencies necessary for the development of an exciting and creative mathematical programme for preschool and primary children. This course will concentrate on topics other than numeration—geometry, measurement, mathematical language, the use of the calculator. The use of manipulative aids in instructing the young child will be explored and illustrated. Students will be expected to become familiar with relevant resource materials and assignments will emphasize developing activities for classroom use.

EDUC 398 ***Selected Topics in Education*** (3 credits)

EDUC 399 ***Selected Topics in Education*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

EDUC C405 ***The T.V. Child - The Educational Implications of Children's Television Viewing Patterns***
(3 credits)
This course will examine the effects of television on children from a cognitive-developmental perspective. Learning theory, productive technique, cognitive theory (information processing) will be the basis from which the examination of the communication process between the child and the medium will be examined. Both the positive and negative effects of television on children will be considered. The concept of media literacy and classroom use of television will also be discussed.

EDUC C413 ***Children's Behaviour Problems*** (3 credits)
Prerequisite: EDUC C210 or EDUC C211. This course will focus on the nature of children's behaviour problems and on methods to understand and modify behaviours which interfere with children's emotional, social, and intellectual growth. Students will be involved with the practical applications of the available strategies in order best to help a youngster with behaviour problems according to his or her needs. Specific classroom techniques for coping with the acting-out as well as with the withdrawn child will be given. Students will be taught observational tools, programming suggestions, reinforcement techniques, and evaluation methods.

EDUC C414 ***Learning Problems of Children*** (3 credits)
Prerequisite: EDUC C210 or EDUC C211. This course will describe the causes and kinds of learning problems in young and school-age children. Students will be taught the pre-academic skills that are involved in learning, as well as specific techniques to help youngsters overcome and/or cope with these difficulties. Educational techniques for dealing with problems in reading, mathematics, spelling, writing, and language will be discussed. The whole area of learning problems will be related to children's social, emotional, and intellectual levels.

EDUC C416 ***Education of the Gifted*** (3 credits)
Prerequisite: EDUC C210. This course will discuss the special educational problems of gifted children. It will also assess the effectiveness of the techniques usually employed to deal with these problems.

EDUC C417 ***Education of the Culturally Disadvantaged*** (3 credits)
Prerequisite: EDUC C210. This course will describe the cognitive, social, and emotional problems of culturally disadvantaged children, and discuss educational techniques for coping with their problems.

EDUC C421 ***Sociology of Education*** (6 credits)
Prerequisite: SOCI C203. This course emphasizes sociological concepts and their application to the study of schooling. The focus is on the formal organization of the school, informal systems in the school, socialization processes, education and social class differentiation, and the proposed alternatives to the present structure.

EDUC C426 ***Comparative Education I*** (3 credits)
Prerequisite: Six credits in Education. This course undertakes the study of the impact of political and cultural differences upon educational systems (for example, the impact of language differences, nationalism, colonialism, neocolonialism, political socialization). The approach is comparative, with particular emphasis on constrasting educational systems and practice in western nations (Canada, the United States, United Kingdom, or Western Europe); the Soviet Union; and China or other Third-World nations.

EDUC C427 ***Comparative Education II*** (3 credits)
Prerequisite: Six credits in Education. This course examines the sources and impacts of educational change from a comparative perspective. Topics include pedagogical alternatives; socio-political alternatives; educational implications of technological change and economic policy; policies of elitism and egalitarianism. Methods include comparative case study, and analysis of specific theories of educational innovation.

EDUC C428 ***Philosophy of Education: Concepts and Issues*** (3 credits)
Prerequisite: Three credits at university level in Philosophy or EDUC C230. The course will consider the application of philosophical method to aspects of educational theory or practice, e.g., educational aims, teaching methods, concepts which occur in educational discourse, or educational controversies.

EDUC C429 ***Philosophy of Education: Educational Philosophers and Movements*** (3 credits)
Prerequisite: Three credits at university level in Philosophy or EDUC C230. The course will make a study of a philosopher or school of philosophy whose works include significant educational reference or implication: e.g., Plato, Aristotle, Rousseau, Dewey, Marxism, Utilitarianism, Modern Analytical Philosophy.

EDUC C431 ***Honours Essay in Education*** (6 credits)
Open to third-year students in Honours in Education and Philosophy (or to others by permission of the Department).

EDUC C432 ***Seminar in Epistemology and Education*** (3 credits)
Prerequisite: EDUC C430, or permission of the Department. Theories of knowledge are considered in this course, with special attention being given to the bearing of such topics as perception, evidence, truth, knowledge, and belief as relating to educational thought and practice. Students will be expected to become familiar with recent periodical and other literature in the field.

EDUC C433 ***Seminar in Ethics and Education*** (3 credits)
Prerequisite: EDUC C430, or permission of the Department. Students in this course will study the principles and methods of moral justification in education. They will be referred to the writing of main authors and recent periodical literature.

EDUC C434 ***Seminar in Aesthetics and Education*** (3 credits)
Prerequisite: EDUC C430, or permission of the Department. The nature of aesthetic value and experience, and theories of art and beauty will be examined. The development of the emotions and imagination, and their functions in aesthetic awareness are central concerns of this course. Students will be expected to become familiar with the relevant literature in the field.

EDUC C435 ***Seminar in Philosophy and Education*** (3 credits)
Prerequisite: EDUC C430, or permission of the Department. This is an advanced seminar in philosophical analysis and theory, in which students will present papers on, and conduct discussions about, educational concepts, aims, and practices. Students will be expected to become familiar with the periodical and other literature in the areas under discussion.

EDUC C441 ***History of Educational Ideas*** (6 credits)
Prerequisite: Second-year standing. In this course, students will study major educational ideas and idea systems. These will be reviewed in philosophical, religious, political, and social perspective.

EDUC C442 ***Education in Canada*** (3 credits)
Prerequisite: Six credits in Canadian History. It is advisable that students have a reading knowledge of French. This course will study the history of Canadian education and, more particularly, the history of education in Québec.

EDUC C445 ***Education in Québec*** (3 credits)
Students in this course will study the contemporary movements in and structures of Québec education.

EDUC C461 ***Issues in Early Childhood Education*** (6 credits)
Prerequisite: EDUC C210 or permission of the Early Childhood Director. This course provides a study of selected issues arising from alternative practices and theories in early childhood education. Emphasis is given to teaching skills necessary for evaluating information and resolving issues. Such skills include critical analysis of research; integration of research studies; integration of research, clinical observation, and opinion; and analysis of observation strategies.

EDUC C471 ***Supervised Internship*** (6 credits)
This course is offered only to students enrolled in the Certificate in Education programme. Teaching internship will be carried out in the school where the student is employed. The students will be supervised and their teaching performance evaluated. The students are expected to demonstrate positive evidence of teaching competence and professional behaviour.

EDUC C472 ***Early Childhood Education Internship (Primary)*** (3 credits)
Prerequisite: 60 credits; enrolment in Early Childhood Education Specialization. This course involves a six-week (full days) supervised teaching internship in one or more of the primary grades 1, 2 or 3. Students will be required to attend weekly seminars focusing on resources, methodologies, teaching strategies, behaviour management, classroom climate as well as on their individual specific problems.

EDUC C473 ***Early Childhood Kindergarten Internship*** (3 credits)
Prerequisite: 60 credits; enrolment in Early Childhood Education Specialization. Students must be enrolled in EDUC C474 in the same semester. This course is a supervised kindergarten internship of five half days a week for one semester.
NOTE: Students who have received credit for EDUC C470 may not take this course for credit.

EDUC C474 ***Early Childhood Internship Teaching Seminar*** (3 credits)
Prerequisite: 60 credits; enrolment in Early Childhood Education Specialization. Students must be enrolled in EDUC C473 in the same semester. This course is the teaching component of the kindergarten internship. Students will rehearse and practise skills, discuss specific problems and concerns with the focus on relating theory to practice. Topics covered will include professional behaviour and expectations, behaviour management, curriculum planning, teaching strategies, record keeping, teacher-parent relationships as well as the practical evaluation of various kindergarten curriculum content approaches.
NOTE: Students who have received credit for EDUC C470 may not take this course for credit.

EDUC C480 ***Special Methods of Teaching - Elementary*** (3 credits)
This course is offered only to students enrolled in the Certificate in Education programme. It will deal with methods of teaching in the elementary school. Emphasis will be placed on the practical application of educational theories.

EDUC C481 ***Special Methods of Teaching - Secondary*** (3 credits)
This course is offered only to students enrolled in the Certificate in Education programme. This course will deal with methods of teaching in a high school subject. The course will be designed to suit the individual student's field of specialization.

EDUC C490 ***Children with Health Problems and Handicaps I*** (3 credits)
Prerequisite: EDUC C211; EDUC C262; second-year standing in Early Childhood Specialization or Child Studies Major or permission of the Early Childhood Director. An overview of the extent and significance of childhood illness, accidents, death and handicaps. Consideration of some of the needs of children and their families and means of overcoming some of the barriers to sound development and family well-being. Topics include: societal attitudes, bonding and separation, children's concepts of the body, illness, hospitalization and death, institutionalization, mainstreaming and normalization.
NOTE: This material has been offered in the past under EDUC C497 or C498. Students taking this course should check with their departmental adviser.

EDUC C491 ***Children with Health Problems and Handicaps II*** (3 credits)
Prerequisite: EDUC C490. A continuation from EDUC C490, this course will explore in greater depth and at a more practical level: children's responses to illness and health-related care, and specific interventions which can help foster sound development and family well-being. Topics will include: preparation for resolution of stress provoking events; the helping relationship; the therapeutic use of play, creative expression and children's literature. The underlying principles and approaches are relevant for the educator working with children in any setting, and particularly for those contemplating future work with these children and their families. Laboratory work outside the class is required.
NOTE: This material has been offered in the past under EDUC C497 or C498. Students taking this course should check with their departmental adviser.

EDUC 498 ***Advanced Topics in Education*** (3 credits)

EDUC 499 ***Advanced Topics in Education*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.90.1 ADULT EDUCATION
(formerly Andragogy)

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

42 *Major in Adult Education

**Admission suspended for 1986-87.*

30 Minor or Certificate in Adult Education

The Department of Education offers a 30-credit Minor or Certificate Programme in Adult Education consisting of both required and optional courses: core courses in the foundation of adult education, courses related to functions, skills and competencies of adult educators in the field of practice, and courses related to some dimensions which constitute the body of knowledge of adult education.

Certificate Admission Requirements
In addition to General Admission Requirements, candidates to the Certificate programme in Adult Education should normally be actively involved in some area of adult education *or* have the equivalent of one year prior experience in the field, either as leaders, trainers, teachers, volunteer workers, administrators, etc. in academic institutions, business and industry, government or community organizations. Applicants will be interviewed by the Programme Director.

(Courses must be taken in an approved sequence)

Stage I
6 ADED C201[3], C202[3]
Stage I or II
3 Chosen from ADED C220[3], C230[3], C240[3], 298[3], 299[6]
Stages II and III
6 ADED C333[3], C344[3], C345[3], C351[3], C370[3], 398[3], 399[6]
6 Chosen from ADED C410[3], C412[3], C440[3], 498[3], 499[6]
3 Chosen from cognate courses with the permission of the Programme Director
Stage IV
6 ADED C495[6]

NOTE: With permission of the Programme Director, a course at the 200 level or higher may be taken prior to or concurrently with ADED C201 or C202.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing.

The credits that may be so transferred are determined in consultation with the Programme Director at the point of entry into the programme.

30 Minor in Adult Education

For Admission Requirements - see above Certificate in Adult Education.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ADED C201 ***Concepts and Principles of Adult Education*** (3 credits)
This course consists of an overview of the field of adult education as a field of study with emphasis given to its philosophy, objectives, historical development and the nature of adult learners. It also examines Adult Education as a field of practice with emphasis given to methods, techniques, roles and competencies. This course stresses active student participation and self-directedness.
NOTE: This course and ADED C202 are prerequisites for all 300- and 400-level courses in Adult Education.
NOTE: Students who have received credit for ADED C200 may not take this course for credit.

ADED C202 ***The Scope and Nature of Adult Education Programes*** (3 credits)
The course is designed to help students develop an understanding of the scope and nature of adult education programmes. Emphasis is placed on existing programmes and institutions and agencies providing them. The course stresses active student participation and self-directedness.
NOTE: This course and ADED C201 are prerequisites for all 300- and 400-level courses in Adult Education.
NOTE: Students who have received credit for ADED C200 may not take this course for credit.

ADED C220 ***Adults as Learners*** (3 credits)
Prerequisite: ADED C201; ADED C202. This course examines the unique physiological, psychological and sociological characteristics of adults, their influence on adult learning and development and their implications for educational intervention. Attention is given to changes which occur at various stages of the adult life cycle and particularly to the dimensions which affect the adult's self-concept and orientation to learning, the motivations, needs and interests which cause adults to participate in educational activities.

ADED C230 ***Roles and Competencies of Adult Educators*** (3 credits)
Prerequisite: ADED C201; ADED C202. The purpose of this course is to review the state of professionalization of adult education. General skills, knowledge and attitudes expected of adult educators regardless of the setting in which they work are examined. In addition, according to the participants' needs and interests, an opportunity is given to explore competencies related to the particular roles of, e.g., administrators, programme developers, trainers, leaders, instructors, counsellors, and volunteer workers.

ADED C240 ***Introduction to Research in Adult Education*** (3 credits)
Prerequisite: ADED C201; ADED C202. This course is designed to introduce students as to how to gain access to and utilize major information sources in Adult Education. In addition, the course will examine research interests and problem areas studied in Adult Education and related fields, along with current trends and various methods of enquiry used.

ADED 298 ***Selected Topics in Adult Education*** (3 credits)

ADED 299 ***Selected Topics in Adult Education*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ADED C333 ***Methods and Techniques for Facilitating Adult Learning*** (3 credits)
Prerequisite: ADED C201; ADED C202. This course is designed to give an opportunity to adult educators to practise and improve their skills in facilitating adult learning. Different models of educational processes and optimal conditions for promoting adult learning are examined; attention will be given to small or large group methods and techniques, as well as to individualized learning formats.
NOTE: Students who have received credit for ADED C330 or C331 may not take this course for credit.

ADED C344 ***Design of Adult Learning Projects*** (3 credits)
Prerequisite: ADED C201; ADED C202. The purpose of this course is to assist participants in developing a clear working concept of various models for planning and designing adult learning projects. To facilitate this understanding, the different steps of the process are closely examined and discussed. Participants are given an opportunity to design and conduct a learning activity. A systems approach, including methods for evaluating the design of the learning project is emphasized.
NOTE: Students who have received credit for ADED C340 or C341 or C342 or C343 may not take this course for credit.

ADED C345 ***Evaluation of Adult Learning Projects*** (3 credits)
Prerequisite: ADED C201; ADED C202. The purpose of this course is to assist participants in

developing a clear working concept of various models for assessing the effectiveness of adult learning projects. The course emphasizes a systematic approach to evaluation, techniques for collecting information and providing feedback to programme operation and impact. Participants are given the opportunity to conduct an evaluation of an adult learning project.
NOTE: Students who have received credit for ADED C340 or C341 or C342 or C343 may not take this course for credit.

ADED C351 ***Administration of Adult Education Programmes*** (3 credits)
Prerequisite: ADED C201; ADED C202. This course is designed to develop a better understanding of the principles of organization and administration as they relate to educational programmes for adults. The course also examines the main factors which influence the provision of these programmes along with the various skills necessary at all levels of the decision-making processes: accessing needs, budgeting, staffing, and advertising.

ADED C370 ***Workshops for Adult Educators*** (3 credits)
Prerequisite: ADED C201; ADED C202. The purpose of these workshops is to examine a number of topics and problems related to the field of adult education. The issues considered may differ from year to year; several workshops will be offered over one academic year and students are required to select four workshops from the package. The workshop format is designed to allow adult educators to participate in learning opportunities with flexibility in scheduling. Possible topics are: learning problems of adults, education of immigrants, women and continuing education, literacy and adult basic education, and adult education in rural areas.

ADED 398 ***Selected Topics in Adult Education*** (3 credits)

ADED 399 ***Selected Topics in Adult Education*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ADED C410 ***Adult Education in Canada and Quebec*** (3 credits)
Prerequisite: ADED C201; ADED C202. The purpose of this course is to examine the historical development and current state of adult education in Canada, with special reference to Quebec. Various factors which influenced the development of adult education in our society will be explored; the focus will be on present status, role and structure, and socio-cultural and philosophical underpinnings of the field.

ADED C412 ***Concepts and Values in Adult Education*** (3 credits)
Prerequisite: ADED C201; ADED C202.This seminar is designed to encourage adult educators to reflect upon and question what one is engaged in and why. A selection of conceptual and philosophical issues underlying adult educational practice is critically examined and discussed. Attention is given to the meaning of words, the nature of ideas and values, the implications of assumptions and principles which are deemed specific in the sphere of the education of adults.

ADED C440 ***Issues in the Practice of Adult Education*** (3 credits)
Prerequisite: ADED C201; ADED C202. The purpose of this seminar is to study and discuss current issues relating to the field and profession of adult education in general, along with more specific and local concerns. Group and individual interests will have an important bearing on the design of this course.

ADED C450 ***Adulthood and the Process of Educational Change*** (3 credits)
Prerequisite: ADED C220. This course will examine research literature on the impacts of changes in perception, attitudes, abilities and needs associated with the adult life cycle; and the literature on the impact of institutionalization on adult learners. The course presents a more advanced examination of issues covered in ADED C220, such as: effect of changes in the adult life cycle on instructional methods; effects of changes in institutional policies and organization on educational opportunities for the adult learner.

ADED C495 ***Integrative Seminar*** (6 credits)
Prerequisite: ADED C201; ADED C202. This seminar, to be taken during final year in the programme, is designed to assist individual students in achieving a synthesis of their own experience in the light of acquired knowledge, skills, values and attitudes. The purpose of this course is to help each participant to clarify his/her aims and to structure his/her personal philosophy of adult education.

ADED 498 ***Advanced Topics in Adult Education*** (3 credits)

ADED 499 ***Advanced Topics in Adult Education*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.100 English

Chairman
A. BROES, *Associate Professor*

Professors
H. BEISSEL
R. BELKIN
M. BUTOVSKY
H. FINK
M. FOSTER
W. FRANCIS
J.S. HERZ
D. KETTERER
P. MORLEY
R. PHILMUS

Associate Professors
R. ALLEN
G. AUCHINACHIE
M. BRIAN
A. BRUNE
G. GEDDES
H. HILL
S. HOFFMAN
R.K. MARTIN
L.R. MENDELSOHN
A. NEWELL
L.P. NOWICKI
B. OPALA
E. PECHTER
M. PHILMUS
L.J. POTEET
E.C. RONQUIST
G.D. SHEPS
R.J. SOMMER
J.R. SORFLEET
R.S. WAREHAM
K.E. WATERS

Assistant Professors
B. FREIWALD
K. MARTINDALE
D. TAYLOR

Special Lecturers
T. BYRNES
L. GEFIN
J. MILLER
C. SHAW

Writer-in-Residence
P. LANE

ADMISSION REQUIREMENTS FOR CREATIVE WRITING COURSES AND PROGRAMMES

Genre courses in Creative Writing are conducted as workshops in which enrolment is limited to permit constructive analysis of a student's work. Students wishing to enter any introductory genre course in Creative Writing (C225, C226, C227) must apply by submitting a letter of intent along with a portfolio consisting ordinarily of 20 pages of their own work in any genre. Applications will be received as early as January of each year but no later than March 15. Since student demand regularly outpaces our enrolment capacity, early application is advisable.

Creative Writing programmes (Major and Minor) are designed primarily to develop the literary skills of students with a commitment to writing as an art form. Structured workshops guide students from introductory to advanced levels through the practice of their craft under the supervision of experienced writers.

Students wishing to proceed to the next level of a genre workshop must achieve a final mark of C or better at the previous level.

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.
Students should consult the annual English Department brochure to determine which of the following courses are being offered in any given year.

60* BA Honours in English*

12** Students must take 12 credits from among Groups A, B, and C, with not more than 6 credits from any one group.*

Group A
ENGL C256[6] or C257[3], and C258[3], C260[6], C262[6], C263[6], C267[6], C268[6]

Group B
ENGL C271[3], C273[3], C275[3], C277[3], C280[3], C281[6], C282[6], C283[6], C284[6]

Group C
ENGL C286[6] or C287[3], and C288[3], C304[6], C305[6], C307[3], C308[3], C390[6], C392[6]

6 ENGL C238[3], C290[6], C293[3], C295[3], C296[3], C300[6] or C301[3] and C302[3], C370[6], C371[3], C372[3], C375[6], C379[3]

6 Chosen from ENGL C310[6] through C330[6] (excluding C320[6]) and C430[6], C432[6]

12 Chosen from ENGL C310[6] through C344[6] (excluding C320[6]) and C430[6], C432[6]

6 Chosen from ENGL C310[6], C311[3], C312[3], C320[6], C328[3], C329[3], C330[6]

12 ENGL elective credits (6 credits may be chosen from approved cognate courses CLAS C211[3], C212[3])

6 Chosen from ENGL C310[6] through C499[3]

**NOTE: At least 6 credits must be chosen from among Canadian literature courses.*

***NOTE: One of ENGL C225[6], C226[6], C227[6] may be substituted for courses in Groups B or C.*

60 BA Specialization in English

12* Students must take 12 credits from among Groups A, B, and C, with not more than 6 credits from any one group*

Group A

ENGL C256[6] or C257[3], and C258[3], C260[6], C262[6], C263[6], C267[6], C268[6]

Group B

ENGL C271[3], C273[3], C275[3], C277[3], C280[3], C281[6], C282[6], C283[6], C284[6]

Group C

ENGL C286[6] or C287[3], and C288[3], C304[6], C305[6], C307[3], C308[3], C390[6], C392[6]

6 ENGL C238[3], C290[6], C293[3], C295[3], C296[3], C300[6] or C301[3] and C302[3], C370[6], C371[3], C372[3], C375[6], C379[3]

18 Chosen from ENGL C310[6] through C344[6] (excluding C320[6]) and C430[6], C432[6]

6 Chosen from ENGL C310[6], C311[3], C312[3], C320[6], C328[3], C329[3], C330[6]

18 ENGL elective credits (6 credits may be chosen from approved cognate courses CLAS C211[3], C212[3])

**NOTE: One of ENGL C225[6], C226[6], C227[6] may be substituted for courses in Groups B or C.*

36 BA Major in English

9 Credits in courses on genre and critical method chosen from ENGL C271[3], C273[3], C275[3], C277[3], C280[3], C281[6], C282[6], C283[6], C284[6]. At least 3 credits must be taken within the first 18 credits in English.

12 Credits in English Literature period courses chosen from ENGL C310[6] through C344[6]; C430[6]; C432[6]

15 ENGL elective credits

42 BA Major in Creative Writing*

12 Chosen from ENGL C225[6], C226[6], C227[6]

6 Chosen from ENGL C425[6], C426[6], and C427[6]

6 Chosen from ENGL C410[6], C411[6], C412[6], C413[6], C425[6], C426[6], C427[6]

6 Credits in Canadian Literature

12 ENGL elective credits in literature courses.

**NOTE: Students wishing to register for the Major in Creative Writing should refer to the Admissions Requirements for Creative Writing Courses and Programmes.*

30 Minor in Creative Writing

12 Chosen from ENGL C225[6], C226[6], C227[6]

12* Chosen from ENGL C410[6], C411[6], C412[6], C413[6], C425[6], C426[6], C427[6]

6 ENGL elective credits

Students wishing to register for the Minor in Creative Writing should refer to the Admission Requirements for Creative Writing Courses and Programmes.

**NOTE: At least 6 credits in this group must be chosen from C425[6], C426[6], or C427[6]*

24 Minor in English Language

24 Chosen from ENGL C211[6] or C212[3], and C213[3], C215[3], C255[6], C256[6] or C257[3] and C258[3], C310[6] or C311[3] and C312[3], C393[3], C394[3], C396[6], C430[3], C432[6], C475[3], C477[3]

24 Minor in English Literature

24 ENGL elective credits in literature courses*

**Students are encouraged to consult with the Department in selecting their courses.*

24 Minor in English Dramatic Literature

6 ENGL C320[6]

18 Chosen from ENGL C227[6], C427[6], or English elective credits in dramatic literature

72 BA Joint Honours in English and French

6 ENGL credits chosen from courses C256 through C284

6 ENGL credits chosen from courses C286 through C305; C370[6], C371[3], C372[3], C375[6], C390[6], C392[6]

6 ENGL C310[6], C311[3], C312[3], C320[6], C328[3], C329[3], C330[6]

12 ENGL credits chosen by genre or periods to parallel choice in French courses to be chosen in consultation with the departments

18 FRAN C251[6], C270[3], C271[3], C320[6] or C324[6]

12 FRAN credits chosen by genre or periods to parallel choice in English courses to be chosen in consultation with the departments

6 Elective credits in English or French, outside the parallel periods or genres chosen

6 ENGL C479[6] or FRAN C496[6]*

**NOTE: Students intending to take FRAN C496[6] should note that it has a 400-level prerequisite. 6 of the 12 FRAN elective credits should therefore be chosen at the 400 level.*

60 BA Joint Specialization in English and History

6 Chosen from ENGL C256 through C284

6 ENGL C310[6], C311[3], C312[3], C320[6], C328[3], C329[3], C330[6]

12 ENGL credits chosen from two different periods to parallel History courses to be chosen in consultation with the departments

6 ENGL elective credits

12 HIST credits chosen from two different historical periods to parallel English courses to be chosen in consultation with the departments

18 HIST elective credits

200-level courses and 300-level courses without prerequisite are open to all students and may be used as English electives unless otherwise indicated.

Admission to the Honours programme is granted at the end of the student's first year, after Departmental review. Students who already had Honours status by June 1, 1977, will continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

Written work may be required in English for these courses; please consult with the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ENGL C205 ***Basic Language Skills - Stage I*** (3 credits)
A course for native speakers of English who need basic training in written English. Emphasis is placed on grammar, sentence structure, paragraphing and other fundamentals of good usage.
NOTE: Students who have received credit for any ESL course may not take this course for credit. This course may not count for credit within any English programme.
NOTE: Students must take a placement test before registering for this course.

ENGL C206 ***Basic Language Skills - Stage II*** (3 credits)
Prerequisite: ENGL C205 or placement by the Department. A course for native speakers of English who need basic training in written English. This course is a continuation of ENGL C205.
NOTE: Students who have received credit for any ESL course may not take this course for credit. This course may not count for credit within any English programme.
NOTE: Students must take a placement test before registering for this course.

ENGL C209 ***Elements of Written English*** (3 credits)
Prerequisite: Permission of the Department. This course will deal with problems in written English that students encounter when writing university assignments. The course will begin a few weeks after the commencement of term. This will give students an opportunity to register for it after they have discovered deficiencies in their written English that hinder their academic progress.

ENGL C211 ***English Composition*** (6 credits)
This course is designed to help the students to develop skills in writing, research, and documentation, so that they may be able to prepare written work clearly, concisely, and in a logically organized way.
NOTE: This course may not be taken for credit with ENGL C212 or C213.
Students who have received credit for this course may not take subsequently any ESL course or ENGL C205 or C206.
NOTE: Students must take a placement test before registering for this course.

ENGL C212 ***English Composition - Stage I*** (3 credits)
This course is the equivalent of the first half of ENGL C211. It is designed to provide students with basic training in writing. Stress will be laid on the development of skills in the writing of good expository prose through a study of the basic rules of grammar, in the organization of essays, in effective sentence construction and diction, in effective paragraphing, and in paraphrasing and summarizing.
NOTE: Students who have taken ENGL C211 may not take this course for credit.
Students who have received credit for this course may not take subsequently any ESL course or ENGL C205 or C206.
NOTE: Students must take a placement test before registering for this course.
NOTE: This course may not count for credit in the Major programme.

ENGL C213 ***English Composition - Stage II*** (3 credits)
Prerequisite: ENGL C212 or permission of the Department. This course is the equivalent of the second half of ENGL C211. It develops further the writing skills acquired in ENGL C212. The aim of this course is two-fold: a) to develop skill in writing, appropriate to the audience; and b) to familiarize students with research techniques necessary for the preparation of term papers and other written accounts for business and academic purposes. Instruction will focus on the techniques of persuasion, narration, and description, on logical structure, and how to use the library.
NOTE: Students who have received credit for ENGL C211 may not take this course for credit.
Students who have received credit for this course may not take subsequently any ESL course or ENGL C205 or C206.
NOTE: Students must take a placement test before registering for this course.
NOTE: This course may not count for credit in the Major programme.

ENGL C215 ***Rhetoric*** (3 credits)
An inquiry into the nature and function of Rhetoric (Classical and "New") and of rhetorical criticism; a study of the fundamentals and some of the refinements of prose style; logical and rhetorical analysis, and original compositions.

ENGL C224 ***The Creative Process*** (3 credits)
This is a series of lectures and discussions on aspects of the writing life, including technique, literary influences, sources of inspiration, revision, and process. Material will be drawn from texts, letters,

worksheets, and biographies of well-known poets, prose writers, and playwrights, as well as from the instructor's own experience.
Students will be invited to read widely, participate in discussions, write papers, and engage in some writing of poetry, fiction, or drama. This course is open to all students.

ENGL C225 ***Creative Writing: Poetry*** (6 credits)
A seminar in the writing and criticism of poetry, including detailed discussion and written criticism of the students' work, and, at the discretion of the instructor, the study of selected poems.

ENGL C226 ***Creative Writing: Prose*** (6 credits)
A seminar in the techniques of short fiction, including investigations of and exercises in a variety of creative and technical problems, as well as analysis and criticism of the students' own work. Students may be required to read selected works of short fiction.

ENGL C227 ***Creative Writing: Drama*** (6 credits)
A seminar in the writing of plays, including an exploration of dramatic forms and techniques. The students are expected to submit work of their own for discussion and analysis.

ENGL C232 ***The Oral Interpretation of Poetry and Drama*** (6 credits)
The aim of this course is to demonstrate the close relationship between the rhythm and texture of the spoken word and meaning in poetry and drama. We shall read aloud poems and scenes from plays, studying the importance of emphasis to meaning and (in the latter) the relationship of dialogue to character.

ENGL C235 ***Plays of the Renaissance Theatre*** (3 credits)
Designed as an introduction to Renaissance drama, this course is a study of representative sixteenth- and seventeenth-century plays by such writers as Marlowe, Shakespeare, Jonson, Webster and Molière.

ENGL C236 ***Plays of the Modern Theatre*** (3 credits)
Designed as an introduction to modern drama, this course is a study of some representative modern plays by such writers as Ibsen, Chekov, Shaw, O'Neill, Williams, Synge, Beckett and Pinter.

ENGL C237 ***Children's Literature*** (6 credits)
A survey and analysis of literature for children, undertaken with the aim of developing a critical vocabulary, and of arriving at workable standards of assessment. The kinds of literature discussed will include works written for adults, but traditionally read by children as well, works specifically written or adapted for children, fairy tales, and other children's versions of folklore and myth, nursery rhymes, and other children's verse. The course will be of general interest to students of literature, and should prove especially helpful to those who teach children in the schools.

ENGL C238 ***Canadian Children's Literature*** (3 credits)
This course examines the ways in which elements of the Canadian experience, such as language, setting, folklore, and history, have contributed to the content and tradition of children's literature in Canada.

ENGL C249 ***Images of Women in Literature I*** (3 credits)
Through a variety of literary genres and writers such as Gaskell, Ibsen, Laurence, Woolf, Plath, Lessing, Atwood and Munro, this course examines the literary portrayal of women as adolescents, wives and mothers. The extent to which these traditional images have shaped women's lives and have been resisted or transformed will be explored.

ENGL C250 ***Women in Literature II*** (3 credits)
Through a variety of literary genres and women writers such as Charlotte Brontë, Collette, Lessing, Laurence, Livesay, Piercy, and Rich, this course explores the evolution of "non-traditional" image of single women, communities of women, women as workers and artists.

ENGL C251 ***The Voice of Women in Nineteenth Century Literature*** (3 credits)
This course explores the ways in which women writers of the nineteenth century, such as Austen, the Brontës, George Eliot, Georges Sand, Barrett-Browning, and Dickinson, have used the conventions of fiction and poetry to explore their own lives and those of their contemporaries.

ENGL C252 ***The Voice of Women in Twentieth Century Literature*** (3 credits)
This course explores the ways in which women writers of our time, such as Woolf, H.D. Olsen, Dinesen, Laurence, Sexton and Caryl Churchill, have used and in some cases transformed the conventions of fiction, poetry and drama to explore their own lives and those of their contemporaries.

ENGL C254 ***Psychology and Literature*** (6 credits)
A study of the relationship between the basic theories of psychology or psychoanalysis and literature through a consideration of selected literary works, such as novels, poems, dramas, and fairy tales.

ENGL C255 ***Translation*** (6 credits)
Prerequisite: Fluency in both French and English. Intensive work to improve the student's skill at

translating a variety of texts from French to English. Emphasis will be placed on non-literary texts. Training will be given in style and idiom. The course will help the student gain proficiency in rendering a variety of French texts into idiomatic English prose.

ENGL C256 ***Major Writers in English*** (6 credits)
An introduction to major periods of English literature through the study of such representative authors as Chaucer, Shakespeare, Marlowe, Jonson, Donne, Milton, Swift, Pope, Blake, Coleridge, Wordsworth, Keats, Shelley, Dickens, Hardy, Browning, Tennyson, Conrad, Lawrence, Yeats, Eliot, Woolf, Joyce.
NOTE: This course may not be taken for credit with ENGL C257 or C258.

ENGL C257 ***Introduction to English Literature I*** (3 credits)
An introduction to Chaucer, Spenser, Shakespeare, Milton, and other major English authors of the Middle Ages and the sixteenth and seventeenth centuries.
NOTE: This course may not be taken for credit with ENGL C256.

ENGL C258 ***Introduction to English Literature II*** (3 credits)
A continuation of ENGL C257. An introduction to Swift, Pope, Wordsworth, Tennyson, Yeats, T.S. Eliot, and other major English authors of the eighteenth, nineteenth and twentieth centuries.
NOTE: This course may not be taken for credit with ENGL C256.

ENGL C260 ***Myth and Ideas in Literature*** (6 credits)
The sources, literary development, and continuing functions of some of the myths which generate our ideas, and some of the ideas which rationalize our myths. In various years the emphasis may be on the history, structure, or continuing creation of myth and idea.
NOTE: Students who have received credit for ENGL C259 may not take this course for credit.

ENGL C262 ***Medieval Literature in Translation*** (6 credits)
An introductory study of some major works in England and Europe between 400 and 1400, beginning with St. Augustine, and including examples of epic, Grail literature, and courtly romance such as *Beowulf*, *The Song of Roland*, *The Cid*, Chrétien de Troyes' *Parsifal*, *Tristan and Isolde*, *The Romance of the Rose*, and parts of Dante's *Divine Comedy*.

ENGL C263 ***European Literature from the Middle Ages to the Onset of Modernism*** (6 credits)
A study of some of the classical works of European literature from Dante to Dostoevsky, including such writers as Boccaccio, Rabelais, Cervantes, Rousseau, and Goethe, with emphasis on evolving cultural patterns leading from Faith to Reason, and beyond.

ENGL C267 ***The Origins of Drama*** (6 credits)
An introductory study of Greek and Roman dramatists, and the medieval drama, both English and Continental. The course will be concerned with dramatic types, theory and form, and with the significance of this drama to the later English stage.

ENGL C268 ***Masterpieces of English Literature before 1603*** (6 credits)
An introduction to the origin and development of English literature in the Old English, Medieval, and Tudor periods, through a reading of *Beowulf* (in translation), and authors such as Chaucer, Malory, Spenser, More, and Marlowe.

ENGL C271 ***Critical Reading*** (3 credits)
A course in practical criticism and evaluation of a variety of literary texts. Students will develop their ability to respond to literature clearly and precisely.

ENGL C273 ***Fiction*** (3 credits)
A study of the novel as a literary genre through the reading of novels by authors such as Defoe, Fielding, Austen, Dickens, and Joyce.

ENGL C275 ***Poetry*** (3 credits)
A study of poetry and its forms, with emphasis upon the art of close reading.

ENGL C277 ***Drama*** (3 credits)
A study of a varied selection of plays from both a historical and a generic point of view that will introduce students to the problems and delights of reading, visualizing, making and seeing plays.

ENGL C280 ***Short Fiction*** (3 credits)
A study of forms and techniques of the short story, the novella, and what have come to be called in contemporary literature, "fictions".

ENGL C281 ***Tragedy*** (6 credits)
A study of the varieties of tragic form and sensibility in Western literature. The course includes writers chosen from antiquity to the present, both inside and outside the English tradition, such as Shakespeare, Euripides, Hardy, Tolstoy, Webster, Racine, Faulkner, Buchner, Rilke, and Chekhov.

ENGL C282 ***Comedy*** (6 credits)
A study of the nature and varieties of comic form and sensibility in Western literature. The course includes writers chosen from antiquity to the present, both inside and outside the English tradition, such as Aristophanes, Cervantes, Jonson, Molière, Sterne, Gogol, Leacock, Amis, and Muriel Spark.

ENGL C283 ***Satire*** (6 credits)
A study of the nature and varieties of satire. The course includes writers chosen from antiquity to the present, both inside and outside the English tradition, such as Juvenal, Lucian, Chaucer, Erasmus, Swift, Voltaire, Orwell, Waugh, Beckett, Roth, Richler, and Grass.

ENGL C284 ***Critical Approaches to Literature*** (6 credits)
The practical application to selected works of literature of some of the fundamental methods of criticism such as the psychological, sociological, formalist, archetypal and structural.

ENGL C286 ***Twentieth-Century British Literature*** (6 credits)
A study of twentieth-century British authors such as Joyce, Yeats, Woolf, Shaw, E.M. Forster, Waugh, T.S. Eliot, Auden, and Lessing.
NOTE: This course may not be taken for credit with ENGL C287 or C288.

ENGL C287 ***Modern British Literature*** (3 credits)
A study of modern British authors, such as Hardy, Hopkins, Conrad, Lawrence, E.M. Forster, Woolf, Yeats, and T.S. Eliot.
NOTE: This course may not be taken for credit with ENGL C286.

ENGL C288 ***Contemporary British Literature*** (3 credits)
A study primarily of post-World War II British authors such as Auden, Thomas, Beckett, Pinter, Lessing, and Murdoch.
NOTE: This course may not be taken for credit with ENGL C286.

ENGL C290 ***Canadian Literature*** (6 credits)
An introductory survey of Canadian prose and poetry, written in or translated into English, from their origins to the present.
NOTE: This course may not be taken for credit with either ENGL C291 or C292.

ENGL C293 ***Recent Experiments in Canadian Writing*** (3 credits)
A study of recent works of poetry, fiction, and drama, some of which break with traditional notions of genre, form and content. Attention will be paid to the works of authors such as Kroetsch, Ondaatje, Kogawa, Findley, Walker, Tremblay and Marlatt.

ENGL C295 ***Commonwealth and Third-World Literature Written in English I*** (3 credits)
Selected novels, short stories, and the poetry from West Africa, East Africa, and the Caribbean.

ENGL C296 ***Commonwealth and Third-World Literature Written in English II*** (3 credits)
Selected novels, short stories, and poetry from South Africa, Zimbabwe, India, Australia, and New Zealand.

ENGL 298 ***Selected Topics in English*** (3 credits)

ENGL 299 ***Selected Topics in English*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ENGL C300 ***American Literature*** (6 credits)
A survey of the literature of the United States, beginning with the early writers and their optimistic vision of a new society, and studying such problems as the transformation and inversions of the "American Dream" in such writers as Poe, Hawthorne, Melville, Twain, Whitman, and Fitzgerald.
NOTE: This course may not be taken for credit with ENGL C301 or C302.

ENGL C301 ***American Literature: Nineteenth Century*** (3 credits)
A study of major nineteenth-century American writers such as Poe, Thoreau, Emerson, Hawthorne, Melville, Whitman, and Dickinson.
NOTE: This course may not be taken for credit with ENGL C300.

ENGL C302 ***American Literature: Twentieth Century*** (3 credits)
A study of major twentieth-century American writers such as Fitzgerald, Hemingway, Faulkner, Stevens, Frost, Porter, and Plath.
NOTE: This course may not be taken for credit with ENGL C300.

ENGL C304 ***Modern British and American Literature*** (6 credits)
A study of works in English from what has now emerged as the "Modern" period, extending from the turn of the century to World War II, and including such writers as Conrad, Joyce, Lawrence, Eliot, Yeats, Dylan Thomas, Stevens, Hemingway, Faulkner, Frost, Mansfield, and Bowen.

ENGL C305 ***Modern European Literature*** (6 credits)
A survey of some of the major European writers (in translation) of the last hundred years, including such writers as Dostoevsky, Kafka, Mann, Strindberg, Valéry, Pirandello, Sartre, de Beauvoir, and Brecht.

ENGL C307 ***Modern Fiction I*** (3 credits)
A study of major American and European fiction writers of the earlier modern period, such as Melville, Dostoevsky, Tolstoy, James, Kafka, Joyce, Mann, and Faulkner.
NOTE: Students who have received credit for ENGL C297 may not take this course for credit.

ENGL C308 ***Modern Fiction II*** (3 credits)
A study of major American and European fiction writers of the later modern period such as Malraux, Camus, Flannery O'Connor, Solzhenitsyn, Bellow, Pynchon, Marquez, and Calvino.
NOTE: Students who have received credit for ENGL C298 may not take this course for credit.

ENGL C310 ***Chaucer*** (6 credits)
A study of the major poetry of Chaucer, emphasizing *The Canterbury Tales* and *Troilus and Criseyde.*
NOTE: A maximum of 6 credits may be taken from ENGL C310, C311, and C312.

ENGL C311 ***Chaucer I: The Canterbury Tales*** (3 credits)
A study of *The Canterbury Tales* in general, and of six or seven tales in particular.
NOTE: A maximum of 6 credits may be taken from ENGL C310, C311, and C312.

ENGL C312 ***Chaucer II: Troilus* and Early Poems** (3 credits)
A study of *Troilus and Criseyde* and selected early poems.
NOTE: A maximum of 6 credits may be taken from ENGL C310, C311, and C312.

ENGL C315 ***English Renaissance Literature*** (6 credits)
A study of poetry and prose in English from More to Milton, including such writers as Wyatt, Surrey, Sidney, Spenser, Bacon, Donne, the Metaphysical poets, Jonson, the Caroline lyricists, Browne.
NOTE: This course may not be taken for credit with ENGL C317.

ENGL C316 ***Spenser*** (3 credits)
This course is intended to examine Spenser's works - *The Amoretti* and *The Faerie Queene* in particular - and their relations to the pertinent literary traditions, both English and continental.

ENGL C317 ***Elizabethan Prose and Poetry*** (3 credits)
Significant works of Elizabethan non-dramatic literature will be studied both as individual creations and as samples of the most important trends in non-dramatic verse and prose of the time.
NOTE: This course may not be taken for credit with ENGL C315.

ENGL C318 ***English Renaissance Drama*** (6 credits)
The golden age of English drama from 1485 to 1642; the Tudor interlude; the development of comedy, tragedy and other dramatic forms in the Elizabethan and Jacobean periods. Plays will be selected from authors such as Peele, Kyd, Greene, Marlowe, Chapman, Dekker, Middleton, Jonson, Beaumont and Fletcher, Webster, Marston, Ford, and Shirley. Some consideration will be given to Shakespeare.

ENGL C320 ***Shakespeare*** (6 credits)
A study of Shakespeare's artistic achievement and its background. Works will be chosen from different periods and genres.

ENGL C326 ***Seventeenth-Century Poetry*** (6 credits)
The course will put major emphasis on the poetry of Milton. Other poets to be studied will be selected from among Jonson, Donne, Herbert, Herrick, and Marvell.
NOTE: This course may not be taken for credit with ENGL C327.

ENGL C327 ***Early Seventeenth-Century Literature*** (3 credits)
A study of the poetry and some of the prose of the period, with special emphasis on the work of John Donne.
NOTE: This course may not be taken for credit with ENGL C326.

ENGL C328 ***Milton I: The Early Lyric Poetry and Paradise Lost*** (3 credits)
This course will cover the early lyric poems and masques (1629-37) and will undertake a detailed study of *Paradise Lost.*
NOTE: A maximum of 6 credits may be taken from ENGL C328, C329, and C330.

ENGL C329 ***Milton II: Paradise Regained*, and Other Writings** (3 credits)
This course will examine Milton's work in a variety of genres: tragedy *(Samson Agonistes)*, post-1645 sonnets, epic *(Paradise Regained)*, and selections from the prose essays and tracts.
NOTE: A maximum of 6 credits may be taken from ENGL C328, C329, and C330.

ENGL C330 ***Milton*** (6 credits)
A study of Milton's *Paradise Lost*, and other works such as the shorter poems, selected prose, *Paradise Regained*, and *Samson Agonistes*.
NOTE: A maximum of 6 credits may be taken from ENGL C328, C329, and C330.

ENGL C332 ***Literature of the Restoration and Eighteenth Century*** (6 credits)
A study of poetry and prose from the 1660's to the 1780's, including such major writers as Dryden, Swift, Pope, and Johnson.
NOTE: A maximum of 6 credits may be taken from ENGL C332, C333, and C334.

ENGL C333 ***Literature of the Restoration and Early Eighteenth Century*** (3 credits)
Major Augustan authors, including Dryden, Swift, and Pope.
NOTE: A maximum of 6 credits may be taken from ENGL C332, C333, and C334.

ENGL C334 ***Eighteenth-Century Literature*** (3 credits)
A study of major authors of the eighteenth century, such as Swift, Richardson, Fielding, and Johnson.
NOTE: A maximum of 6 credits may be taken from ENGL C332, C333, and C334.

ENGL C335 ***Restoration and Eighteenth-Century Drama*** (3 credits)
A study of the English stage from Dryden to Sheridan, including such dramatists as Etherege, Otway, Wycherley, Vanbrugh, Congreve, Gay, Lillo, and Goldsmith.

ENGL C338 ***Literature of the Romantic Period*** (6 credits)
A study of poetry and prose, chiefly that of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats.
NOTE: A maximum of 6 credits may be taken from ENGL C338, C339, and C340.

ENGL C339 ***The Romantics I*** (3 credits)
The course will survey the major poets of the first part of the Romantic period (Blake, Wordsworth, Coleridge), with historical background and emphasis on the common technical and thematic elements of Romantic poetry.
NOTE: A maximum of 6 credits may be taken from ENGL C338, C339, and C340.

ENGL C340 ***The Romantics II*** (3 credits)
The course will survey the major poets of the second part of the Romantic period (Byron, Shelley, and Keats), with historical background and emphasis on the common technical and thematic elements of Romantic poetry.
NOTE: A maximum of 6 credits may be taken from ENGL C338, C339, and C340.

ENGL C342 ***Victorian Literature*** (6 credits)
A study of English poetry and prose from the 1830's to the end of the nineteenth century, including such major writers as Tennyson, R. Browning, Hopkins, Carlyle, Gaskell, Ruskin, Dickens, Thackeray, and George Eliot.
NOTE: A maximum of 6 credits may be taken from ENGL C342, C343, and C344.

ENGL C343 ***Victorian Prose*** (3 credits)
A study of Victorian prose writers such as Dickens, George Eliot, Thackeray, Carlyle, Newman, Arnold, and Mill.
NOTE: A maximum of 6 credits may be taken from ENGL C342, C343, and C344.

ENGL C344 ***Victorian Poetry*** (3 credits)
A study of Victorian poets such as Tennyson, Browning, Hopkins, Swinburne, and Hardy.
NOTE: A maximum of 6 credits may be taken from ENGL C342, C343, and C344.

ENGL C347 ***English Fiction from Defoe to Scott*** (6 credits)
A study of the origins and early development of English fiction, focussing on such forms as the epistolary, the picaresque, the Gothic and the historical novel, and such writers as Defoe, Fielding, Richardson, Smollett, Sterne, Radcliffe, Burney, Godwin, Mary Shelley, Edgeworth, Austen and Scott.

ENGL C348 ***English Fiction from Dickens to Hardy*** (6 credits)
This course stresses the development and diversity of the Victorian novel through a study of works by such writers as Dickens, Gaskell, the Brontës, Thackeray, Eliot, Trollope, Meredith and Hardy. Some attention may be given to the growth of experimental, non-realistic and popular forms of fiction such as the fantasy, the mystery and the adventure.

ENGL C350 ***Late Victorian and Edwardian Literature*** (6 credits)
The end of the Victorian era and the beginnings of modernism. Novelists include James, Forster, Gissing, Woolf, Wilde, and Beardsley.

ENGL C354 ***Anglo-Irish Literature*** (6 credits)
Emphasis on the major English language writers of Ireland: notably O'Casey, Synge, Lady Gregory, Joyce, Yeats, and Beckett.

ENGL C360 ***Introduction to American Studies*** (6 credits)
An interdisciplinary consideration of the elements that go toward making up the "American Character" and the nature of art and culture in America: studies in literature, history, sociology, psychology, religion, and fine arts.

ENGL C362 ***American Writers of the '20s*** (6 credits)
A study of the American expatriate generation of the 1920's, with particular emphasis on Fitzgerald, Hemingway, Gertrude Stein, and their relationships with the cultural and artistic milieus centered in Paris.

ENGL C363 ***Modern American Fiction*** (3 credits)
The twentieth-century American novel up to 1945. Authors such as Dreiser, Cather, Wharton, Fitzgerald, Hemingway, Faulkner, West, Henry Roth, and Wright will be read.

ENGL C364 ***Contemporary American Fiction*** (3 credits)
The twentieth-century American novel since 1945. Authors such as F. O'Connor, Styron, Welty, Bellow, Updike, and Pynchon will be read.

ENGL C367 ***American Poetry*** (3 credits)
A study of the theory and practice of the major American poets since the mid-nineteenth century. Particular emphasis will be placed on poets such as Whitman, Dickinson, Frost, Cummings, Williams, Stevens, Pound, Crane, Eliot, and H.D., with some attention paid to developments in contemporary poetry as well.

ENGL C369 ***American Drama*** (3 credits)
A study of the plays of major American dramatists such as O'Neill, Williams, Miller, Albee, and Sam Shepard.

ENGL C370 ***Canadian Fiction: Beginnings to World War II*** (6 credits)
A study of the themes and technical strategies of Canadian fiction in its formative period, including romance, naturalism, documentary, autobiography, fable, and myth. Texts will be drawn from authors such as Haliburton, Moodie, Duncan, Leacock, Grove, Callaghan, Ostenso, Ross and Lowry.
NOTE: Students who have credit for ENGL C376 and C377 may not take this course for credit.

ENGL C371 ***Postwar Canadian Fiction I*** (3 credits)
A study of modern Canadian fiction through the 50's to the mid-60's as it incorporates the lyrical and documentary, the universal and the regional, the traditional and the experimental. Authors may include Roy, Wilson, Buckler, Maclennan, Watson and Richler.

ENGL C372 ***Postwar Canadian Fiction II*** (3 credits)
A study of continuity and development in modern Canadian fiction from the mid-60's through the 70's. Authors may include Laurence, Gallant, Atwood, Davies, Carrier Hébert and Hodgins.

ENGL C375 ***Modern Canadian Poetry and its Roots*** (6 credits)
A study of poets such as Pratt, Klein, Page, Livesay, Birney, Layton, Purdy, Webb, Atwood, and Ondaatje with their predecessors among the poets of Confederation.

ENGL C378 ***Canadian Criticism, Thought, and Controversy*** (3 credits)
Prerequisite: Six credits in Canadian literature. An examination of some of the main features of Canadian literary criticism and its interaction with social and political thought. Writers such as the following will be considered: E.K. Brown, H.A. Innis, George Grant, Northrop Frye, Marshall McLuhan, George Woodcock, Eli Mandel, Margaret Atwood.

ENGL C379 ***Canadian Drama*** (3 credits)
A study of several twentieth century Canadian playwrights such as George F. Walker, George Ryga, Bryan Wade, Ken Gass, Michel Tremblay and Sharon Pollock who, taken together, represent such conflicts in Canadian art as regionalism and internationalism, realism and experimentation.

ENGL C385 ***The Bible and English Literature*** (6 credits)
A study of the literary handling of Biblibal material and the literary uses of Biblical allusion in English Literature by authors such as Milton, Bunyan, Blake, Byron, and T.S. Eliot.

ENGL C386 ***Literature, Ideology, and Society*** (6 credits)
Studies in the relations between literature and its social, cultural, and political environment. The content of this course may vary from year to year and may include such topics as the relations between modern Anglo-Irish literature and the Irish nationalist movement; social change and the evolution of forms of characterization in fiction; and theory and practice of the avant-garde; or confessional modes in literature in relation to social and political messianism.

ENGL C387 ***The Aesthetic and Religious Experience in Literature*** (6 credits)
An interdisciplinary course which explores the relationships between literature and religion through practical criticism, literary theory, aesthetics, and theology.

ENGL C390 ***Modern Poetry*** (6 credits)
An examination of the characteristic elements of twentieth-century poetry, in the context of a study of such major poets as Yeats, Eliot, Pound, Stevens, and Auden.

ENGL C392 ***Modern Drama*** (6 credits)
A study of the main currents in Western drama since Ibsen. This course will include such representative playwrights as Chekhov, Lorca, Strindberg, Pirandello, O'Neill, Brecht, Pinter, Beckett, and Weiss.
NOTE: This course may not be taken for credit with ENGL C236.

ENGL C393 ***History and Structure of the English Language*** (3 credits)
The course deals with the linguistic and historic development of the English language. The influence of language changes upon the literature will also be considered.

ENGL C394 ***English Prose Style*** (3 credits)
This course is designed to introduce students to the experience and assessment of the subtleties and varieties of prose style within the English tradition. It will include selections from the works of distinguished prose stylists.

ENGL C395 ***Science Fiction*** (6 credits)
An exploration of the varieties and nature of science fiction from H.G. Wells to Ursula LeGuin. Readings will include examples of English and American science fiction and translations of foreign works. Among the authors studied will be Huxley, Orwell, Zamyatin, Jack London, Capek, Borges, Calvino, and Lem.

ENGL C396 ***Advanced Composition*** (6 credits)
Prerequisite: ENGL C211; or ENGL C212; ENGL C213; or permission of the Department. This course is designed for students already in control of the basic techniques of composition and who wish to perfect their ability to write clearly and effectively for business and professional purposes.
NOTE: Unless ENGL C211, C212 or C213 have been completed previously, students must take a placement test before registering for this course.

ENGL C397 ***Technical Writing*** (3 credits)
Prerequisite: ENGL C211 or ENGL C212; ENGL C213 or permission of the Department. This course is designed for students who wish to develop their ability to write technical material, including reports, resumés, summaries, reviews, instructional and descriptive manuals, and similar items.

ENGL 398 ***Selected Topics in English*** (3 credits)

ENGL 399 ***Selected Topics in English*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ENGL C410 ***Non-Fiction Writing*** (6 credits)
Prerequisite: ENGL C225; ENGL C226; ENGL C227 or permission of the Department. A workshop for students who intend to become professional writers of the forms of non-fiction (such as journals, personal essays, biographies, autobiographies, and reviews).

ENGL C411 ***Script Writing for Radio, Screen, and Television*** (6 credits)
Prerequisite: ENGL C225; ENGL C226; ENGL C227, or permission of the Department. A workshop for the composition and development of creative scripts for radio, screen, and television. In any one year, the course may concentrate on one or two of these areas.

ENGL C412 ***Writing of Children's Literature*** (6 credits)
Prerequisite: ENGL C225; ENGL C226; ENGL C227, or permission of the Department. A workshop in the writing of prose, poetry, and drama for children. This course will involve an exploration of the literary techniques appropriate to the sensibilities of children and their world.

ENGL C413 ***Editing, Publishing, and Creative Research*** (6 credits)
Prerequisite: Permission of the Department. This course deals with such areas as magazines, small presses, and anthologies, that stimulate and promote literary activity. Emphasis will also be given to the research problems peculiar to the creative writer.

ENGL C425 ***Advanced Creative Writing: Poetry*** (6 credits)
Prerequisite: ENGL C225, or approved work. A workshop in the writing of poetry. The students are expected to enter this course with competence in the fundamentals of the form, and to go on, by experimenting more fully with its material and techniques, to demonstrate their further progress in the craft.

ENGL C426 ***Advanced Creative Writing: Prose*** (6 credits)
Prerequisite: ENGL C226, or approved work. A workshop in the writing of fiction. The students are expected to enter this course with competence in the fundamentals of the form, and to go on, by

experimenting more fully with its materials and techniques, to demonstrate their further progress in the craft.

ENGL C427 ***Advanced Creative Writing: Drama*** (6 credits)
Prerequisite: ENGL C227, or approved work. A workshop in the writing of plays. The students are expected to enter this course with competence in the fundamentals of the form, and to go on, by experimenting more fully with its materials and techniques, to demonstrate their further progress in the craft.

ENGL C430 ***Old English*** (6 credits)
A study of the language and literature of the Anglo-Saxon era, chiefly of the *Beowulf* epic.

ENGL C432 ***Middle English Literature*** (6 credits)
A study of literature written in the English dialects from 1200 to 1500, including works such as *Sir Gawain and the Green Knight* and other romances, early lyrics, religious prose, drama, and selections from Layamon's *Arthurian Brut*, Langland's *Piers Plowman*, and Malory's *Morte Darthur*.

ENGL C440 ***The Literatures of Canada and the United States*** (6 credits)
Prerequisite: ENGL C290; or ENGL C291; ENGL C292; or ENGL C300; or ENGL C301; ENGL C302. It is to the student's advantage to enter this course with knowledge of both literatures. Studies in common and contrasting problems in the two national literatures.

ENGL C459 ***Contemporary Literature*** (6 credits)
Prerequisite: Six credits in modern literature. A study of poetry, prose fiction, and drama, written in or translated into English since the Second World War. This course is intended for the student whose exploration of modern literature has already suggested to him something of the radical experimentation in form which characterizes contemporary literature.

ENGL C475 ***Patterns of English Speech*** (3 credits)
The course will examine the relationship between spoken and written English from a variety of points of view: linguistic, semantic, philosophical, literary. The course will emphasize oral English and will include such topics as phonology, intonational patterns, dialect, slang.

ENGL C477 ***Advanced Stylistics*** (3 credits)
On the basis of linguistic studies made by the student in ENGL C475, this course will examine sentence structures, paragraph formation, tone, diction, argumentation.

ENGL C478 ***Independent Studies*** (3 credits)
A tutorial programme arranged with a member of the Department.
NOTE: Students who have received credit for ENGL C497 may not take this course for credit.

ENGL C479 ***Independent Studies*** (6 credits)
A tutorial programme arranged with a member of the Department.
NOTE: Students who have received credit for ENGL C498 may not take this course for credit.

ENGL C480 ***Honours Essay*** (3 credits)
Prerequisite: Open to third-year Honours students. Under the supervision of a faculty member, students will write a scholarly essay of some 7,500 to 10,000 words.
NOTE: Students who have received credit for ENGL C499 may not take this course for credit.

ENGL C484 ***Critical Theories of Literature*** (6 credits)
Prerequisite: Six credits in literature. This course explores theories in criticism from Plato and Aristotle to the present and considers such topics as mimesis, catharsis, symbol, language, voice, persona, unity of the text, audience response and social context.

ENGL C490 ***Joint Tutorial in History and English*** (6 credits)
A tutorial for students in the English and History Joint Honours Programme.

ENGL C491 ***Joint Tutorial in Modern Languages and English*** (6 credits)
A tutorial for students in the English and Modern Languages Joint Honours Programme.

ENGL C496 ***Advanced Research and Thesis*** (6 credits)
A small number of seminars or tutorials on special themes and topics, to vary each year. Registration is limited to Honours students in their final year. All students must consult in advance with the Department.

ENGL 498 ***Advanced Topics in English*** (3 credits)

ENGL 499 ***Advanced Topics in English*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.110 Études Françaises

Chairman
M. CATRY-VERRON, *Associate Professor*

Professors
P. D'HOLLANDER
M. EUVRARD
G. LAURION
G. TAGGART

Professor in the Conservatory of Cinematographic Art, Sir George Williams Campus
S. LOSIQUE

Associate Professors
G. CHARPENTIER
A. JORDAN
C. LEVY
D. LEVY
P. L'HERAULT
M.F. LIGIER
P. PARC
O. RIGAULT
J. SCHNEIDER
L. SUGDEN
M. TIFFOU
N. TRUCHON
L. VAN TOCH
M. VERTHUY
J. WOODSWORTH

Adjunct Assistant Professors
J. DANCETTE
S. SIMON

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

72 BA Joint Honours in English and French
6 ENGL credits chosen from courses C256 through C284
6 ENGL credits chosen from courses C286 through C305; C376[6], C377[6], C390[6], C392[6]
6 ENGL C310[6], C311[3], C312[3], C320[6], C328[3], C329[3], C330[6]
12 ENGL credits chosen by genre or periods to parallel choice in French courses to be chosen in consultation with the departments
18 FRAN C251[6], C270[3], C271[3], C320[6] or C321[3], and C322[3], C324[6]
12 FRAN credits chosen by genre or periods to parallel choice in English courses to be chosen in consultation with the departments
6 Elective credits in English or French, outside the parallel periods or genre chosen
6 ENGL C479[6] or FRAN C496[6]*

**NOTE: Students intending to take FRAN C496[6] should note that it has a 400 level prerequisite. Six of the twelve FRAN elective credits should therefore be chosen at the 400 level.*

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

60 BA Honours in French Literature
6 Chosen from FRAN C251[6], C252[3], C253[3], C270[3], C271[3], C320[6], C321[3], C322[3]
9 Chosen from FRAN C262[6], C324[6], C366[3], C367[3], C370[3], C371[3], C478[3], C480[3], C481[3], C482[3], C483[3], C489[6]
9 Middle Ages and 16th-Century literature
9 17th- and 18th-Century literature
9 19th- and 20th-Century literature
6 FRAN C496[6]
6 Credits in culture or literature of the French-speaking world
6 Credits in Québec literature

Other courses in literature may be chosen in consultation with the Department.

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

60 BA Specialization in French Literature
6 Chosen from FRAN C251[6], C252[3], C253[3], C270[3], C271[3], C320[6], C321[3], C322[3]
9 Chosen from FRAN C262[6], C324[6], C366[3], C367[3], C370[3], C371[3], C372[3], C381[3], C382[3], C478[3], C480[3], C481[3], C482[3], C483[3], C489[6]
9 Middle Ages and 16th-Century literature
9 17th- and 18th-Century literature
9 19th- and 20th-Century literature
6 FRAN C496[6]
6 Credits in Québec literature
6 Credits outside the Département d'Études françaises in cognate fields chosen in consultation with the Department

Other courses in literature may be chosen in consultation with the Department.

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

36 BA Major in French Literature
6 Chosen from FRAN C251[6], C252[3], C253[3], C270[3], C271[3], C320[6], C321[3], C322[3]
9 Chosen from FRAN C262[6], C324[6], C366[3], C367[3], C370[3], C371[3], C372[3], C378[3], C480[3], C481[3], C482[3], C483[3], C489[6]

21 Elective credits in French literature

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

24 Minor in Literature

24 Elective credits in French or Quebec Literature chosen in consultation with the Department.

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

60 BA Honours in Quebec Literature

6 FRAN C251[6] or C252[3] and C253[3]
3 FRAN C322[3] or C271[3]
18 Chosen from FRAN C350[3], C351[3], C352[3], C353[3], C354[3], C355[3], C356[3], C357[3], C358[3]
18 Chosen from FRAN C450[3], C451[3], C452[3], C453[3], C454[3], C455[3], C456[3], C457[3], C458[3], C459[3]
6 FRAN C496[6]
9 Credits in culture or literature of the French-speaking world.

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

60 BA Specialization in Quebec Literature

6 FRAN C251[6] or C252[3] and C253[3]
18 Chosen from FRAN C350[3], C351[3], C352[3], C353[3], C354[3], C355[3], C356[3], C357[3], C358[3]
18 Chosen from FRAN C450[3], C451[3], C452[3], C453[3], C454[3], C455[3], C456[3], C457[3], C458[3], C459[3]
6 FRAN C496[6]
6 Credits in culture or literature of the French-speaking world.
6 Credits outside the Département d'Études françaises in cognate fields chosen in consultation with the Department.

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

36 BA Major in Quebec Literature

6 FRAN C251[6] or C252[3] and C253[3]
6 Chosen from FRAN C270[3], C271[3], C320[6], C321[3], C322[3], C324[6]
18 Chosen from FRAN C350[3], C351[3], C352[3], C353[3], C354[3], C355[3], C356[3], C357[3], C358[3]
6 Chosen from FRAN C450[3], C451[3], C452[3], C453[3], C454[3], C455[3], C456[3], C457[3], C458[3], C459[3]

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

60 BA Specialization in French/English Translation

NOTE:

1. Enrolment in the BA Specialization in French/English Translation is limited. Since the nature of the programme requires competence in French and English, applicants are required to take an entrance examination. Priority of enrolment in translation courses at the 300 and 400 levels shall be given to students admitted to the Translation Programme.

2. Students admitted to the Translation Programme are required to achieve a C or better in all translation courses in order to proceed to the next level and to graduate. Students who obtain a passing grade that is below C will be placed on conditional standing within the programme and will be so informed in writing by the Chairman of the Department. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see §16.3.8 of University Calendar). Students who fail to repeat the course(s) within one year will be required to withdraw from the programme upon notification by the Chairman of the Department. Students who obtain a failing grade in any of the translation courses will be required to withdraw from the programme and will be so informed in writing by the Chairman of the Department.

Stage I

6 FRAN C324[6], C366[3] and C367[3], C400[3] and C401[3] or C406[3] and C407[3]
6 Chosen from ENGL C212[3] and C213[3], C396[6]
6 Chosen from FRAN C250[3], C251[6], C252[3], C253[3], C455[3], C456[3] or any other course in Québec literature offered by the Département d'Études françaises, chosen in consultation with the Translation Programme adviser.
6 FRAN C260[3], C261[3]

Stage II

9 FRAN C360[3], C361[3], C462[3]
3 FRAN C362[3] or C363[3]
3 Chosen from FRAN C365[3], C368[3], C369[3]
6 Linguistics in consultation with the Department

Stage III

12 FRAN C364[3], C460[3], C461[3], C463[3]
3 Chosen from FRAN C470[3] or C471[3] or English course chosen in consultation with the Translation Programme adviser

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

48 BA Major in Language and Translation (French & English)

This programme is not designed for those who intend to pursue a professional career in translation. It will be of special interest to those whose work or career prospects require a proficiency in writing in English and French. Translation is the main pedagogical means for promoting such proficiency.

6 FRAN C302[3] and C303[3] or FRAN C400[3] and C401[3]
6 Chosen from FRAN C400[3] and C401[3] (if not taken previously), FRAN C324[6], FRAN C406[3] and C407[3], FRAN C412[3]

and C413[3], FRAN C414[3] and C415[3], FRAN C418[3] and C419[3], FRAN C489[6]
6 Credits in culture or literature of the French-speaking world
6 Chosen from ENGL C212[3], C213[3], C396[6]
6 Credits in literature of the English-speaking world
6 FRAN C260[3] and C261[3]
9 Chosen from FRAN C360[3], C361[3], C362[3], C363[3], C365[3], C368[3], C369[3], C460[3], C461[3]
3 FRAN C364[3] or FRAN C462[3]

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department.

36 BA Major in French Language

30 An approved sequence of language courses. The 30 credits must be chosen from courses that begin at a level higher than FRAN C205 and be distributed as follows:

A maximum of 18 credits from: C254[3], C255[3], C270[3], C271[3], C302[3], C303[3], C304[3], C305[3], C306[3], C307[3], C308[6], C310[3], C311[3], C312[3], C313[3], C316[3], C317[3], C318[3], C319[3], including a maximum of 6 credits "langue de spécialité" (C310 to C319).

-The other credits shall be chosen from C262[6], C264[3], C265[3], C269[3], C324[6], C366[3], C367[3], C384[3], C400[3], C401[3], C404[3], C405[3], C406[3], C407[3], C409[3], C410[3], C412[3], C413[3], C414[3], C415[3], C418[3], C419[3], C466[3], C467[3], C489[6]

6 credits in culture or literature of the French-speaking world

24 Minor in French Language

24 An approved sequence of language courses commencing at a level higher than FRAN C203:

-A maximum of 18 credits from C204, C205, C206, C207, C208, C270, C271, C302, C303, C304, C305, C306, C307, C308, C310, C311, C312, C313, C316, C317, C318, C319, including a maximum of 6 credits "langue de spécialité" (C310 to C319).

-The other credits shall be chosen from C264, C265, C366, C367, C384, C400, C401, C404, C405, C406, C407, C409, C410, C412, C413, C414, C415, C418, C419, C466, C467, C489.

NOTE: Prior to registration students must have written approval for their programme from the Department.

30 Certificate in French Language

30 An approved sequence of courses commencing at a level higher than FRAN C201. A minimum of 6 credits will be chosen from:
C264, C265, C366, C367, C384, C400, C401, C404, C405, C406, C407, C409, C410, C412, C413, C414, C415, C418, C419, C466, C467.

NOTE: Prior to registration students must have written approval for their programme from the Department.

30 Certificate in Teaching French as a Second Language to Adults

Admission Requirements:
Candidates must have
- At least one year's experience as a teacher of French, or permission of the programme director
- FRAN C400 or equivalent

Candidates must take a test of proficiency in oral French and be able to follow TESL and ADED courses in English

3 FRAN C264[3] or C265[3]
6 Chosen from FRAN C467[3], C468[3], C469[3]
3 FRAN C381[3]
3 Chosen from FRAN C382[3], C385[3]
6 TESL C341[3], C415[3]
6 ADED C201[3] or C202[3] and 3 TESL credits in consultation with the Department. Exceptionally other courses or another distribution of the above courses may be accepted with the authorization of the programme director.
3 FRAN C488[3]

NOTE: Prior to registration students must have written approval for their programme from an authorized member of the Department. Those students who wish to obtain both the Certificate in Teaching French as a Second Language to Adults and the Certificate in the Teaching of English as a Second Language must replace TESL C341[3] and TESL C415[3] by other courses with the approval of the Department.

Teaching practice completed with adults does not qualify students to be recommended for teacher certification.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Les cours du département ayant reçu de nouveaux numéros, les étudiants trouveront une liste d'équivalences à la section 200.1.

FRAN C200 ***French Language: Elementary I*** (3 credits)
This course is intended for students having no previous training in French. It includes a comprehensive introduction to the basic structures and vocabulary of French and should enable students to acquire an ability to speak and understand simple conversational French. Both oral and written aspects of the language are presented, with special emphasis on oral skills. Laboratory sessions are included.

FRAN C201 ***French Language: Elementary II*** (3 credits)
Prerequisite: FRAN C200 or equivalent. Continuation of the previous course.

FRAN C202 ***Langue française: niveau de transition I*** (3 crédits)
Préalable: FRAN C201 ou l'équivalent. Ce cours s'adresse normalement aux étudiants ayant suivi soit un an de français à l'université ou au niveau collégial, soit deux ans de français à l'école secondaire, ou l'équivalent. Ce cours permet aux étudiants d'accéder à un niveau de compréhension et d'expression suffisant pour communiquer en français oralement et par écrit avec une certaine assurance. Par l'utilisation de techniques de conversation dirigée, de travail systématique en classe et au laboratoire et d'exercices écrits, les étudiants acquerront un répertoire de structures et un vocabulaire plus étendu. Séances de laboratoire.

FRAN C203 ***Langue française: niveau de transition II*** (3 crédits)
Préalable: FRAN C202 ou l'équivalent. Suite du cours précédent.

FRAN C204 ***Langue française: niveau intermédiaire I*** (3 crédits)
Préalable: FRAN C203 ou l'équivalent. Ce cours s'adresse normalement aux étudiants ayant suivi soit 4 ans de français à l'école secondaire, soit 2 ans de français à l'université ou au niveau collégial ou l'équivalent. Par une étude et une pratique intensive des tournures du français courant, l'étudiant pourra acquérir l'aisance nécessaire à une communication orale et écrite spontanée. Le cours fournira également quelques aperçus sur le mode de vie des francophones.

FRAN C205 ***Langue française: niveau intermédiaire II*** (3 crédits)
Préalable: FRAN C204 ou l'équivalent. Suite du cours précédent.

FRAN C206 ***Cours de grammaire niveau intermédiaire I*** (3 crédits)
Préalable: FRAN C203 ou l'équivalent. Ce cours s'adresse en particulier aux étudiants parlant français avec une certaine aisance et qui voudraient améliorer leur expression écrite par une étude des règles fondamentales de la grammaire et par de nombreux travaux pratiques.

FRAN C207 ***Cours de grammaire niveau intermédiaire II*** (3 crédits)
Préalable: FRAN C206 ou l'équivalent. Suite du cours précédent.

FRAN C208 ***L'art de vivre au Québec I*** (6 crédits)
Préalable: FRAN C203 ou l'équivalent. Cours intensif qui a pour but principal de permettre à l'étudiant de niveau intermédiaire de s'intégrer au milieu québécois, au moyen de discussions et d'activités dirigées par un professeur et animées par des moniteurs-étudiants francophones. Pratique systématique du français en classe. Participation en petits groupes à des activités culturelles dépassant le cadre scolaire.
NOTE: Les étudiants qui ont suivi FRAN C300 ne peuvent obtenir de crédits pour ce cours.

FRAN C220 ***Littérature moderne*** (6 crédits)
Préalable: FRAN C205 ou l'équivalent. Au moyen d'un choix de nouvelles, romans, pièces de théâtre, et poèmes de la francophonie, l'étudiant apprendra à "lire", et à apprécier les caractéristiques des différents genres.

FRAN C221 ***Le français par les textes littéraires I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Étude de la langue fondée sur l'examen de textes littéraires courts: poèmes, contes, articles, lettres, scènes de théâtre, etc. Exercises d'analyse et de composition.

FRAN C222 ***Le français par les textes littéraires II*** (3 crédits)
Préalable: FRAN C221 ou l'équivalent. Étude de la langue fondée sur l'examen de textes littéraires longs: romans, essais, pièces de théâtre. Exercises d'analyse et de création.

FRAN C250 ***Littérature québécoise en traduction*** (3 crédits)
Étude de la littérature québécoise en traduction, surtout du point de vue de l'écriture (vocabulaire, style, images, etc.). Étude de textes sur le plan thématique, linguistique, stylistique, et structural. Analyses des meilleures traductions disponibles. Travaux pratiques en traduction, compositions, recherches.
Textes: Bessette *Le libraire;* Blais, *La Belle Bête;* Thériault, *Agaguk;* Hébert, *Kamouraska,* etc.
NOTE: Ce cours n'est pas crédité dans les programmes de mineure, de majeure, de BA spécialisé, et d'honneurs en littérature québécoise.

FRAN C251 ***Culture et civilisation québécoises*** (6 crédits)
Préalable: FRAN C205 ou l'équivalent. La culture et la civilisation québécoises vues à travers une de leurs expressions particulières: la littérature. Étude des grandes étapes de la production littéraire avec, comme toile de fond, un aperçu général de l'histoire politique, économique, sociale, et culturelle du Québec. Étude des principaux courants de pensée dans le Québec d'hier et d'aujourd'hui: l'expression littéraire comme reflet du mouvement de libération et du processus de décolonisation québécois. Ce cours vise en outre à ce que les étudiants entrent en contact avec diverses manifestations culturelles québécoises: théâtre, chanson, cinéma, etc.
NOTE: Les étudiants qui ont suivi FRAN C252 et/ou C253 ne peuvent obtenir de crédits pour ce cours.

FRAN C252 ***Culture et civilisation québécoises I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Panorama de la littérature québécoise, de la Nouvelle-France à la fin du 19e siècle, vu dans une perspective socio-historique. Par l'étude de textes significatifs, on retracera le processus historique de différenciation et d'affirmation collective des Québécois.
NOTE: Les étudiants qui ont suivi FRAN C251 ne peuvent obtenir de crédits pour ce cours.

FRAN C253 ***Culture et civilisation québécoise II*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Panorama de la littérature québécoise du 20e siècle vu dans une perspective socio-historique. Étude des grandes étapes de la production littéraire avec, comme toile de fond, un aperçu général de l'histoire politique, économique, sociale et culturelle du Québec. Étude des principaux courants de pensée.
NOTE: Les étudiants qui ont suivi FRAN C251 ne peuvent obtenir de crédits pour ce cours.

FRAN C254 ***Langue et condition des femmes au Québec I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Ce cours vise deux objectifs: examiner les différents aspects de la condition des femmes au Québec (évolution, débat actuel, etc.) et permettre à l'étudiant/e de se donner la compétence langagière en vue d'une participation au débat sur la condition féminine. Le cours sera structuré autour de certains thèmes ou dossiers tels que: le rôle des organismes politiques, gouvernementaux et syndicaux dans le débat; les questions d'actualité sociale concernant la femme: la publicité sexiste, la femme et la politique, la femme au foyer et la femme au travail, la femme et les arts, la santé des femmes, la pornographie, le viol, la violence, etc.
NOTE: Les étudiant/e/s francophones ne peuvent s'inscrire à ce cours.
Les étudiant/e/s qui ont suivi FRAN C312 ne peuvent obtenir de crédits pour ce cours.

FRAN C255 ***Langue et condition des femmes au Québec II*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Ce cours vise des objectifs semblables à ceux du cours FRAN C254 et obéit aux mêmes principes. Le choix des thèmes sera toutefois différent.
NOTE: Les étudiant/e/s francophones ne peuvent s'inscrire à ce cours.
Les étudiant/e/s qui ont suivi FRAN C313 ne peuvent obtenir de crédits pour ce cours.

FRAN C256 ***Littératures de la francophonie I: le Maghreb*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Cours d'introduction à la littérature d'expression française de l'Algérie, du Maroc et de la Tunisie. Le but de ce cours est de familiariser l'étudiant avec le corpus littéraire qui apparaît en Afrique du Nord sous l'influence de la France, mais véhicule une culture de type essentiellement arabo-berbère. Textes choisis dans les oeuvres de Mouloud Feraoun, Mohammed Dib, Mouloud Mammeri, Kateb Yacine, Rachid Boudjedra, Assia Djebar, Aïcha Lemsine, Driss Chraïbi, Tahar Ben Jelloun, Albert Memmi, Mustapha Tlili, etc.

FRAN C257 ***Littératures de la francophonie II: l'Afrique noire*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Cours d'introduction à la littérature négro-africaine. Étude des principaux écrivains noirs depuis le mouvement de la "négritude" jusqu'à nos jours. D'abord anticolonialiste, puis, après les indépendances, franchement contestataire, cette littérature sera étudiée en fonction de l'histoire récente de l'Afrique et surtout de la grande mutation des années soixante. Textes choisis parmi les oeuvres de Léopold Sédar Senghor, Aimé Césaire, Yambo Ouologuem, Mongo Béti, Sembe Ousmane, Camara Laye, Tchicaya U Tam'Si, Ferdinand Oyono, Sony Labou Tansi, etc.

FRAN C260 ***Stylistique comparée du français et de l'anglais*** (3 crédits)
Préalable: FRAN C307 ou l'équivalent. Le cours a pour but d'étudier les ressources stylistiques du français par rapport à celles de l'anglais. Le passage entre les deux langues est étudié en fonction des tendances particulières à chaque langue, tant du point de vue grammatical et lexical que du point de vue du contexte culturel.

FRAN C261 ***Initiation à la traduction*** (3 crédits)
Préalable: FRAN C260 ou l'équivalent. Traduction de textes vers l'anglais et vers le français, avec étude des problèmes typiques soulevés par le passage d'une langue à l'autre. Brève initiation à la terminologie.

FRAN C262 ***Introduction à la linguistique française*** (6 crédits)
Préalable: FRAN C303 ou l'équivalent. Introduction à l'analyse descriptive de la structure linguistique du français contemporain. Aperçus des aspects phonémiques, morpho-syntaxiques, et lexicaux de la langue considérée comme un système. Applications théoriques et pratiques.

FRAN C264 ***Phonétique I*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Étude systématique des habitudes articulatoires du français en comparaison avec celles de l'anglais. Introduction aux principes de l'analyse phonologique: groupes consonantiques possibles ou impossibles dans les deux langues. Étude de l'aspect physiologique de la parole; propriétés des voyelles et des consonnes en français. Étude des phénomènes prosodiques; intonation, rythme, accent. Aperçu de la phonétique acoustique et expérimentale.

FRAN C265 ***Phonétique II*** (3 crédits)
Préalable: FRAN C264. Séminaire de recherche expérimentale. Initiation à l'utilisation des instruments de recherche. Étude détaillée de segments linguistiques du point de vue du timbre des voyelles, de l'articulation des consonnes, et des faits prosodiques (accent, rythme, intonation). Étude

expérimentale de problèmes relevant de la comparaison des systèmes phonétiques du français et de l'anglais.

FRAN C269 ***Histoire de la langue française*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Le but de ce cours est de familiariser l'étudiant avec les grands moments de la langue (Concile de Tours, Edit de Villers Cotterêts, etc.) afin de lui donner une vue panoramique et diachronique de l'évolution du français.
NOTE: Les étudiant/e/s qui ont suivi FRAN C384 ne peuvent obtenir de crédits pour ce cours.

FRAN C270 ***Introduction à l'histoire de la culture et de la civilisation françaises I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Abondamment illustré de projections, ce cours a pour but essentiel d'amener les étudiants à replacer la littérature dans son contexte historique, social, politique, et artistique.

FRAN C271 ***Introduction à l'histoire de la culture et de la civilisation françaises II*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Suite chronologique du cours FRAN C270.

FRAN 298 ***Étude d'un sujet particulier*** (3 crédits)

FRAN 299 ***Étude d'un sujet particulier*** (6 crédits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

FRAN C302 ***Langue française: niveau d'approfondissement I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Le cours d'approfondissement est destiné aux étudiants qui possèdent déjà une bonne cconnaissance du français et qui ont besoin d'améliorer leur expression écrite et orale. Pratique de la lecture, de la rédaction et de la grammaire.

FRAN C303 ***Langue française: niveau d'approfondissement II*** (3 crédits)
Préalable: FRAN C302 ou l'équivalent. Suite du cours FRAN C302.

FRAN C304 ***Le code oral I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Ce cours permettra à l'étudiant de se sentir à l'aise devant les diverses formes de la langue parlée. Étude des caractéristiques de la langue orale (marques phonologiques, lexicales et morphosyntaxiques). Initiation à l'identification des niveaux de langue du français parlé et aux variantes nationales et régionales par des exercices de compréhension et d'expression.

FRAN C305 ***Le code oral II*** (3 crédits)
Préalable: FRAN C304 ou l'équivalent. Suite du cours FRAN C304.

FRAN C306 ***Le code écrit I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Ce cours permettra à l'étudiant de distinguer les marques caractéristiques du style écrit de celles de la langue parlée (aux niveaux lexical, morphosyntaxique et stylistique). Des exercices appropriés permettront à l'étudiant de mettre en pratique les connaissances acquises.

FRAN C307 ***Le code écrit II*** (3 crédits)
Préalable: FRAN C306 ou l'équivalent. Suite de cours FRAN C306.

FRAN C308 ***L'art de vivre au Québec II*** (6 crédits)
Préalable: FRAN C205 ou l'équivalent. Suite du cours FRAN C208. Ce cours intensif a pour but d'amener l'étudiant(e) à approfondir la matière du cours précédent. Les objectifs visés et les moyens pédagogiques mis en oeuvre sont donc semblables à ceux du cours FRAN C208. Le cours s'adresse aux étudiant(e)s de niveau d'approfondissement.

FRAN C310 ***Le français de la récréologie, de l'éducation physique et des sports I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Cours destiné aux étudiants qui travaillent déjà ou qui se préparent à oeuvrer dans le domaine de la récréologie et des sports. Les thèmes étudiés comprennent le conditionnement physique, le rôle du sport dans la société, le reportage sportif, l'organisation des loisirs dans la ville et dans la nature, etc. L'acquisition du vocabulaire, des structures, et des niveaux de langue choisis en fonction de ces thèmes se fera en situations de travail simulées, par la pratique et la discussion à partir de documents authentiques et par une recherche individuelle.

FRAN C311 ***Le français de la récréologie, de l'éducation physique et des sports II*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Suite du cours FRAN C310.

FRAN C312 ***Le français des sciences sociales I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Ce cours s'adresse aux étudiants qui désirent participer activement en français à la vie politique et aux activités communautaires du Québec d'aujourd'hui. Les thèmes étudiés incluent les organismes politiques, gouvernementaux, et syndicaux, et leurs rôles respectifs, ainsi que les questions d'actualité sociale concernant la femme, la famille, etc. Par des lectures et recherches individuelles, discussions, débats, et simulation de situations authentiques, les étudiants pourront acquérir la compétence langagière nécessaire pour jouer un rôle actif dans la société qui les entoure.
NOTE: Les étudiants qui ont suivi FRAN C254 ne peuvent obtenir de crédits pour ce cours.

FRAN C313 ***Le français des sciences sociales II*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Suite du cours FRAN C312.
NOTE: Les étudiants qui ont suivi FRAN C255 ne peuvent obtenir de crédits pour ce cours.

FRAN C316 ***Le français de la bibliothéconomie I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Le cours est destiné aux étudiants qui travaillent ou se préparent à travailler dans les divers services des bibliothèques et des centres de ressources tels que le service du prêt, des acquisitions, du catalogue, etc. On étudie le vocabulaire et les structures nécessaires pour communiquer en français avec les usagers et pour échanger des renseignements en code oral ou écrit avec d'autres bibliothécaires, maisons d'édition, etc. On simulera des situations de travail, et chaque étudiant devra faire une recherche personnelle se rapportant à ses intérêts individuels.

FRAN C317 ***Le français de la bibliothéconomie II*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Suite du cours FRAN C316.

FRAN C318 ***Le français commercial I*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Le cours vise à faciliter la communication efficace orale et écrite dans le domaine des affaires. Il comprend une révision des structures, mais l'effort principal porte sur l'acquisition des termes et tournures de la langue du commerce, de la banque, et des affaires. On s'efforce d'enseigner ces termes en simulation de situations réelles, par ex.: au téléphone, entrevues, réunions, rédaction administrative et commerciale. On encourage les étudiants à entreprendre un projet individuel pour approfondir le vocabulaire de leur domaine particulier.

FRAN C319 ***Le français commercial II*** (3 crédits)
Préalable: FRAN C205 ou l'équivalent. Suite du cours FRAN C318.

FRAN C320 ***Panorama de la littérature française*** (6 crédits)
Préalable: FRAN C303 ou l'équivalent. Ce cours, qui traite de la littérature française des origines à nos jours, s'adresse aux étudiants qui ont choisi la littérature comme domaine de spécialisation principale ou secondaire.
NOTE: Les étudiants qui ont suivi FRAN C321 et/ou C322 ne peuvent obtenir de crédits pour ce cours.

FRAN C321 ***Panorama de la littérature française I*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Ce cours, qui traite de la littérature française des origines à la fin du règne de Louis XIV, s'adresse aux étudiants qui ont choisi la littérature comme domaine de spécialisation principale ou secondaire.
NOTE: Les étudiants qui ont suivi FRAN C320 ne peuvent obtenir de crédits pour ce cours.

FRAN C322 ***Panorama de la littérature française II*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Ce cours complète le cours FRAN C321 par une étude de la littérature française, de la Régence à nos jours.
NOTE: Les étudiants qui ont suivi FRAN C320 ne peuvent obtenir de crédits pour ce cours.

FRAN C324 ***Initiation à la composition avancée*** (6 crédits)
Préalable: FRAN C303 ou l'équivalent. Révision de la grammaire. Techniques de mise en oeuvre des moyens d'expression écrite et orale. Étude des différentes méthodes d'analyse et de composition, y compris la dissertation. Méthodologie de la présentation des travaux.

FRAN C350 ***Les origines de la littérature québécoise*** (3 crédits)
Préalable: FRAN C251. D'une littérature coloniale à une littérature autochtone. De la tradition orale à l'écriture. Étude de textes écrits avant l'École patriotique de Québec.

FRAN C351 ***La littérature québécoise du 19ème siècle*** (3 crédits)
Préalable: FRAN C251. Étude des grands mouvements littéraires du 19ème siècle et des principaux genres illustrés (conte, histoire, roman, essai, prose militante, etc.)

FRAN C352 ***Le roman québécois du 20ème siècle I*** (3 crédits)
Préalable: FRAN C251. Le roman québécois traditionnel: le roman de la fidélité, le roman d'observation, le roman de la solitude, le roman de la critique et de la satire. Étude de textes significatifs des romanciers et des romancières les plus marquants tels que: Hémon, Desrosiers, Grignon, Harvey, Savard, Ringuet, Guèvremont, Roy, Thériault, Langevin, Charbonneau, etc.

FRAN C353 ***Le roman québécois du 20ème siècle II*** (3 crédits)
Préalable: FRAN C251. Le roman de revendication sociale et le nouveau roman. Étude de textes significatifs des romanciers et des romancières les plus marquants tels que: Girouard, Renaud, Major, Blais, Ferron, Godbout, Jasmin, Bessette, Aquin, Ducharme, Beaulieu, Hébert, Larocque, Bersianik, etc.

FRAN C354 ***La poésie québécoise du 20ème siècle I*** (3 crédits)
Préalable: FRAN C251. De l'École littéraire de Montréal à l'automatisme. Etude de textes significatifs des poètes les plus marquants: Nelligan, Loranger, Beauchemin, Desrochers, Coderre, Hébert, Saint-Denys Garneau, Grandbois, Lansier, etc.

FRAN C355 ***La poésie québécoise du 20ème siècle II*** (3 crédits)
Préalable: FRAN C251. De l'automatisme à aujourd'hui: mouvements et formes poétiques. Étude de textes significatifs des poètes les plus marquants: Gauvreau, Hénault, Giguère, P.-M. Lapointe, Miron, Chamberland, R. Duguay, Garneau, Vanier, Francoeur, etc.

FRAN C356 ***Le théâtre québécois I*** (3 crédits)
Préalable: FRAN C251. L'évolution du théâtre jusqu'à Marcel Dubé. Aperçu historique, thématique, et formel. Le théâtre historique, patriotique, comique, le mélodrame, le drame bourgeois. Formation des troupes québécoises. Étude de textes, avec une attention particulière portée au théâtre de Gélinas, Dubé, Hébert, Savard, etc.

FRAN C357 ***Le théâtre québécois II*** (3 crédits)
Préalable: FRAN C251. Le nouveau théâtre québécois: théâtre social et politique, théâtre expérimental, théâtre d'improvisation, recherches de nouvelles formes théâtrales. Études de textes: Tremblay, Germain, Sauvageau, Loranger, Barbeau, Garneau, le Grand-cirque ordinaire, etc. En plus d'avoir recours aux textes publiés, ce cours s'appuiera d'une façon particulière sur la production courante du théâtre à Montréal.

FRAN C358 ***L'essai et le développement de la pensée québécoise*** (3 crédits)
Préalable: FRAN C251. Étude des grands thèmes et de l'évolution des formes de la pensée québécoise à travers l'essai. Textes de: Buies, Nevers, LeMoyne, Vadeboncoeur, Dumont, Vallières, Rioux, Bouthillette, etc.

FRAN C360 ***Traduction littéraire du français à l'anglais*** (3 crédits)
Préalable: FRAN C261. Traduction de textes français choisis par le professeur.

FRAN C361 ***Traduction littéraire de l'anglais au français*** (3 crédits)
Préalable: FRAN C261. Traduction de textes anglais choisis par le professeur.

FRAN C362 ***Traduction technique du français à l'anglais*** (3 crédits)
Préalable: FRAN C261. Initiation aux différents domaines de la traduction technique. Le semestre sera réparti en modules. Chaque module sera confié à un traducteur spécialisé dans un domaine particulier.

FRAN C363 ***Traduction technique de l'anglais au français*** (3 crédits)
Préalable: FRAN C261. Initiation aux différents domaines de la traduction technique. Le semestre sera réparti en modules. Chaque module sera confié à un traducteur spécialisé dans un domaine particulier.

FRAN C364 ***Théories de la traduction*** (3 crédits)
Préalable: FRAN C360 ou FRAN C361. Ce cours abordera les différentes façons d'envisager la traduction, de l'adaptation à la traduction automatique.

FRAN C365 ***Adaptation publicitaire*** (3 crédits)
Préalable: FRAN C261 ou autorisation du département. Initiation à l'adaptation en français ou en anglais de textes publicitaires. À partir d'exemples empruntés à la publicité écrite, radiophonique, ou télévisée, les étudiants seront amenés à se familiariser avec les modifications linguistiques, affectives, et sociales inhérentes au travail d'adaptation.

FRAN C366 ***Stylistique interne du français I*** (3 crédits)
Préalable: FRAN C303, ou autorisation du département. Analyse des ressources stylistiques du français: du mot au texte. Historique et théories contemporaines du style de l'analyse descriptive à la théorie des écarts. Étude des grands genres littéraires et de leur évolution.

FRAN C367 ***Stylistique interne du français II*** (3 crédits)
Préalable: FRAN C366. Suite du cours C366 et applications pratiques.

FRAN C368 ***Traduction spécialisée du français à l'anglais*** (3 crédits)
Préalable: FRAN C261. Initiation aux différents problèmes de la traduction administrative, commerciale et juridique du français à l'anglais. Chaque module du cours sera confié à un traducteur spécialisé dans un des domaines abordés.

FRAN C369 ***Traduction spécialisée de l'anglais au français*** (3 crédits)
Préalable: FRAN C261. Initiation aux différents problèmes de la traduction administrative, commerciale et juridique de l'anglais au français. Chaque module du cours sera confié à un traducteur spécialisé dans un des domaines abordés.

FRAN C370 ***Introduction au genre romanesque*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Le genre romanesque sera étudié dans une perspective spécifique qui pourra varier selon l'année et le professeur: théorie du roman, catégories de roman, sociologie du roman, étude d'un type particulier de roman.

FRAN C371 ***Introduction à la poésie*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Le vers français: les formes fixes, le vers libre, le poème en prose; les notions de poétique et d'art poétique. Esthétique de la poésie, esthétique de la prose et leurs interférences; étude historique. La poésie, discours social ou a-social? Les différents aspects de

la question, ou certains d'entre eux, seront étudiés, avec des exemples, dans une perspective qui pourra varier selon l'année et le professeur.

FRAN C372 ***Introduction au théâtre en tant que genre*** (3 crédits)
Préalable: FRAN C303, ou l'équivalent. Ce cours permettra aux étudiants, à partir d'un petit nombre de textes, de voir les caractéristiques du théâtre en tant que genre, d'analyser sa fonction littéraire et sociale, d'étudier sa place particulière dans les différents mouvements littéraires en France.

FRAN C373 ***Le cinéma français I*** (6 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du département. Ce cours, abondamment illustré de films ou d'extraits de films, retrace, en tout ou en partie, l'histoire du septième art dans ses manifestations les plus originales et les plus caractéristiques.

FRAN C374 ***Le cinéma français II*** (6 crédits)
Les étudiants s'inscrivant pour la deuxième fois au cours de FRAN C373 obtiennent les crédits FRAN C374.

FRAN C381 ***Introduction à la didactique du français langue seconde*** (3 crédits)
Préalable: FRAN C400 ou l'équivalent. Aperçu historique de l'évolution des méthodes utilisées dans l'enseignement du français langue seconde avec étude des principes linguistiques, psychologiques et sociologiques sous-jacents. Étude critique et analyse des nouvelles approches méthodologiques, en particulier celles qui ont trait à l'enseignement aux adultes évoluant en milieu québécois.

FRAN C382 ***Analyse et création de matériel didactique*** (3 crédits)
Préalable: FRAN C400 ou l'équivalent. Acquisition des connaissances et des techniques nécessaires à l'élaboration de plans de cours et de matériel didactique pour l'enseignement du français langue seconde. Étude du matériel existant et travaux pratiques de sélection, d'adaptation et de création de documents.

FRAN C384 ***Évolution de la langue française*** (6 crédits)
Préalable: FRAN C303 ou l'équivalent. Ce cours retrace l'évolution de la langue, du latin vulgaire au français contemporain. Après une étude de la syntaxe de l'ancien français, ce cours relèvera les changements phonétiques, syntaxiques et lexicaux importants qui ont affecté le français au cours des siècles pour l'amener à son état actuel.
NOTE: Les étudiant/e/s qui ont suivi FRAN C269 ne peuvent obtenir de crédits pour ce cours.

FRAN C385 ***Les média dans l'enseignement du français langue seconde*** (3 crédits)
Préalable: FRAN C400 ou l'équivalent. Étude des caractéristiques des divers média et des techniques de réalisation et de présentation de documents audio-visuels destinés à l'enseignement du français langue seconde. Des travaux pratiques permettront à l'étudiant de se familiariser avec les appareils et d'élaborer du matériel didactique médiaté.

FRAN 398 ***Étude d'un sujet particulier*** (3 crédits)

FRAN 399 ***Étude d'un sujet particulier*** (6 crédits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

FRAN C400 ***Langue française: niveau de perfectionnement I*** (3 crédits)
Préalable: FRAN 303, ou l'équivalent. Cours avancé de langue, axé sur l'étude de la grammaire et de la stylistique française, permettant à un étudiant qui possède déjà une connaissance approfondie de la langue de corriger ses lacunes, de nuancer son expression, et d'explorer les possibilités créatrices du langage. Le cours débouchera sur une connaissance de base des civilisations et des cultures francophones.

FRAN C401 ***Langue française: niveau de perfectionnement II*** (3 crédits)
Préalable: FRAN C400, ou l'équivalent. Suite du cours FRAN C400.

FRAN C404 ***Le code oratoire I*** (3 crédits)
Préalable: FRAN C303, ou l'équivalent. Correction phonétique, en particulier au niveau de la langue "soignée", techniques de présentation de la parole en public: pose de voix, gestes, affectivité, etc. Étude du vocabulaire et des procédures nécessaires pour convoquer une réunion, la diriger, y participer. Rédaction et présentation de divers types de rapports, allocutions, et conférences. Séances de travaux pratiques en laboratoire, 1½h. par semaine.

FRAN C405 ***Le code oratoire II*** (3 crédits)
Préalable: FRAN C404, ou l'équivalent. Suite du cours FRAN C404.

FRAN C406 ***Le code grammatical I*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Étude des règles fondamentales de la grammaire française à l'aide d'exercices d'analyse et de construction de phrases, ayant pour but la correction de l'orthographe et de la syntaxe.

FRAN C407 ***Le code grammatical II*** (3 crédits)
Préalable: FRAN C406, ou l'équivalent. Ce cours a pour but de fixer définitivement les connaissances grammaticales pratiques des étudiants, en particulier de ceux qui envisagent de poursuivre leurs études de français à un niveau supérieur. La norme étudiée dans ce cours tiendra compte à la fois des principes de la grammaire traditionnelle et des progrès récents dans l'étude de la langue. L'étude des unités d'expression mènera, par des exercices pratiques d'analyse fonctionnelle, à l'examen approfondi de certains points de stylistique.

FRAN C409 ***Cours libre de traduction I*** (3 crédits)
Préalable: 6 crédits parmi FRAN C304; FRAN C305; FRAN C306; FRAN C307; FRAN C400; FRAN C401; ou autorisation du département. Étude systématique des anglicismes; notions de méthodologie de la traduction; étude de quelques aspects de la stylistique comparée du français et de l'anglais; travaux pratiques de traduction de l'anglais au français.
NOTE: Ce cours est destiné particulièrement, mais non exclusivement, aux étudiants qui ne se spécialisent pas en traduction. Les étudiants qui ont suivi FRAN C408 ne peuvent s'inscrire à ce cours.

FRAN C410 ***Cours libre de traduction II*** (3 crédits)
Préalable: FRAN C409 ou autorisation du département. Suite du cours précédent.

FRAN C412 ***Initiation à la terminologie du droit I*** (3 crédits)
Préalable: FRAN C303, ou l'équivalent. Le cours s'adresse aux étudiants qui, dans leur profession ou celle à laquelle ils se préparent, doivent utiliser le vocabulaire de l'appareil judiciaire et la terminologie des différentes branches du droit. On étudiera les situations telles que conflit locataire - propriétaire, problèmes d'assurance, contrat de mariage, etc. Par une étude théorique et pratique de divers litiges, par une recherche individuelle et en jouant les rôles de divers personnages en situation, les étudiants approfondiront leurs connaissances de la langue du droit et apprendront à l'utiliser.

FRAN C413 ***Initiation à la terminologie du droit II*** (3 crédits)
Préalable: FRAN C412. Suite du cours FRAN C412.

FRAN C414 ***Le français de l'industrie I*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Le cours s'adresse à ceux qui, dans les entreprises, oeuvrent dans le domaine de la production, ou qui se préparent à une carrière dans ce domaine. Les thèmes étudiés comprennent l'organisation d'une entreprise, les relations de travail, les étapes de la fabrication. En plus, chaque étudiant devra faire une recherche individuelle sur le vocabulaire qui se rapporte à son propre milieu et à sa situation.

FRAN C415 ***Le français de l'industrie II*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Ce cours vise des objectifs semblables à ceux du cours FRAN C414 et obéit aux mèmes principes. Le choix des thèmes sera toutefois différent.

FRAN C418 ***Le français de l'économie*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Étude approfondie du vocabulaire de l'économie. Les principaux sujets abordés porteront sur les concepts fondamentaux de la science économique et sur des problèmes que pose le développement économique du Canada et du Québec entre autres. Le cours vise à faciliter à l'étudiant la compréhension de la documentation existant dans ces domaines et la communication orale et écrite de ses idées.

FRAN C419 ***Le français de la finance et de la gestion*** (3 crédits)
Préalable: FRAN C303 ou l'équivalent. Examen des principales difficultés de la langue française à partir d'une documentation axée sur la science de la gestion et le monde de la finance. Étude approfondie du vocabulaire français de la gestion administrative (management), la gestion des ressources humaines, la gestion comptable, et financière, etc. Le cours vise à faciliter l'usage du français dans les relations d'affaires.

FRAN C420 ***Littérature du Moyen-Âge*** (6 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du département. Initiation à la langue et à la littérature du Moyen-Âge, au moyen d'un choix d'oeuvres épiques, romanesques, lyriques, historiques, pouvant varier d'une année à l'autre. En plus d'acquérir une vue générale de la littérature et une connaissance approfondie de quelques oeuvres en traduction, l'étudiant se familiarisera suffisamment avec la langue pour ne plus être embarrassé à la lecture d'un texte en ancien français.

FRAN C421 ***Panorama de la littérature française du Moyen-Âge I*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Au moyen d'une sélection d'oeuvres des IXème, Xème, XIème et XIIème siècles, ce cours se propose de faire connaître et apprécier à l'étudiant les premières manifestations de la littérature française. (Serment de Strasbourg, chanson de geste, roman courtois, etc.)

FRAN C422 ***Panorama de la littérature française du Moyen-Âge II*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Au moyen d'une sélection d'oeuvres des XIIIème, XIVème, et XVème siècles, ce cours se propose de faire connaître et apprécier les richesses littéraires du Moyen-Âge depuis les fabliaux et le *Roman de la Rose* jusqu'au Grand Testament de François Villon.

FRAN C425 ***Introduction à la vie littéraire du XVIème siècle*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Les milieux. Les outils culturels. Les idéologies: problèmes, programmes, thèmes. Les événements littéraires: genèse, langue, portée.

FRAN C426 ***La poésie du XVIème siècle: des doctrines aux oeuvres*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Marot, Scève, Ronsard, D'Aubigné: leurs recherches, leur évolution, leur rayonnement.

FRAN C427 ***La littérature en prose du XVIème siècle: du conte à l'essai*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Orientation et fixation des types "humanistes" dans la littérature narrative et spéculative du XVIème siècle: Marguerite de Navarre, Rabelais, Montaigne.

FRAN C428 ***La littérature de l'âge baroque*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Les dissonances de l'âge classique - Du romanesque au burlesque et à la fuite poétique. Théophile de Viau, Saint-Amant, Rotrou, Cyrano de Bergerac.

FRAN C429 ***Le siècle classique*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. La société classique: la Ville et la Cour, les salons, les honnêtes gens, les chefs-d'oeuvre classiques.

FRAN C430 ***Le théâtre et le roman classiques*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Les dramaturges face aux règles classiques. La tragédie et la comédie classiques. Du roman précieux au roman classique.

FRAN C431 ***Les moralistes*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. La pensée religieuse de Pascal à Bossuet. La morale laïque (La Fontaine). Les mondains (La Bruyère et La Rochefoucauld).

FRAN C432 ***L'aube des lumières*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. La querelle des Anciens et des Modernes et la remise en question du classicisme. Intérêt pour les questions politiques, religieuses, et sociales. Vers le dix-huitième siècle.

FRAN C433 ***Le siècle des lumières*** (6 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Le combat philosophique: ses origines, ses théories, ses modalités. Crise et critiques de la société française du XVIIème siècle: problèmes et solutions envisagées.
Les tendances littéraires: la question des genres; la question du goût: du beau objectif au beau subjectif; évolution de la langue: du style académique au style naturel.

FRAN C434 ***Littérature du XVIIIème siècle: les oeuvres militantes*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. L'esprit philosophique: libre examen; recherche d'une vérité positive; aspects de la satire, religieuse et sociale: des *Lettres Persanes* à *l'Encyclopédie*.

FRAN C435 ***Littérature du XVIIIème siècle: théâtre et roman I*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Une passion du siècle: le théâtre (la comédie psychologique, la comédie militante: de Lesage à Beaumarchais).
Un rival: le roman. Orientations du genre: du roman picaresque au roman philosophique; du roman libertin au roman préromantique.

FRAN C438 ***Le romantisme*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Le romantisme, phénomène européen; ses causes, ses caractères particuliers en France. Le Mal du siècle, ses vagues successives et leurs causes. Les grands thèmes romantiques.
Étude d'oeuvres caractéristiques de Chateaubriand, Lamartine, Vigny, Hugo, Musset.

FRAN C439 ***Littérature de la période romantique*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Évolution des écrivains de la période romantique. La révolution de 1830 et "l'école du désenchantement". Étude, dans un choix de romans, de l'invention de techniques réalistes propres à exposer les problèmes éthiques, sociaux, et politiques d'une société qui s'urbanise et s'industrialise.

FRAN C440 ***Littérature sous le second-empire: une littérature ironique et critique*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. On cherchera à étudier et à expliquer la rupture qui intervient dans la deuxième moitié du XIXème siècle dans la forme et dans la finalité des oeuvres littéraires, particulièrement, dans ce cours, chez Baudelaire et chez Flaubert.

FRAN C441 ***La fin du siècle: entre la tour d'ivoire et le monde réel*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. On cherchera à étudier et à expliquer quelles tendances littéraires nouvelles s'expriment sous des termes comme réalisme, naturalisme, ou symbolisme, dans des oeuvres de Verlaine, Mallarmé, Rimbaud, Huysmans, Zola, Gide.

FRAN C442 ***Introduction au XXème siècle*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Les facteurs historiques, économiques, et socio-politiques qui caractérisent la IIIème République aux environs de 1900; les mouvements qui agitent la société française et leurs répercussions dans la vie culturelle, particulièrement littéraire, de la "Belle Époque". On étudie un certain nombre d'essais (Maurras, Bergson, Péguy ...) qui distinguent l'héritage du siècle précédent des tendances nouvelles qui marqueront la littérature du XXème siècle.

FRAN C444 ***Le roman et la poésie de 1900 à 1920*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Distinction entre la littérature en vogue et celle qui prépare le renouveau littéraire de l'entre-deux-guerres par l'étude des oeuvres de certains représentants de ces deux courants choisis parmi les suivants: France, Barrès, Bourget, Gide, Valéry, Proust, Apollinaire, et Tzara.

FRAN C445 ***Le roman et la poésie de l'entre-deux guerres*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. La guerre 14-18 et ses conséquences. Littérature des "années folles"; l'internationalisme pacifiste et l'inquiétude spirituelle. Analyse de l'explosion surréaliste. Les auteurs seront choisis parmi les suivants: Radiguet, Rolland, Jules Romains, Martin du Gard, Mauriac, Bernanos, Green, Giono, Colette, Breton, Eluard.

FRAN C446 ***Le roman et la poésie du XXème siècle I*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Littérature désabusée, littérature engagée. Problèmes de l'homme et de la société moderne. Le roman de la grandeur et de la condition humaines. Les écrivains de la Résistance. Les auteurs étudiés seront choisis parmi les suivants: Saint-Exupéry, Malraux, Montherlant, Céline, Giraudoux, Emmanuel, Jouve, Char.

FRAN C447 ***Le roman et la poésie du XXème siècle II*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Le domaine contemporain. Répercussion de la seconde guerre mondiale sur la vie sociale et culturelle. Littérature de l'absurde et du néant; pessimisme viril; tendances littéraires récentes: le nouveau roman, le surréalisme en question, la nouvelle poésie. Les auteurs étudiés seront choisis parmi les suivants: Camus, Sartre, Beauvoir, Robbe-Grillet, Queneau, Butor, Prévert, Michaux, Tournier.

FRAN C450 ***Symboles et archétypes de l'imaginaire québécois en littérature*** (3 crédits)
Préalable: FRAN C251. Identification, description, évolution des grands symboles et archétypes de l'imaginaire québécois en littérature. Examen des modes de production et de transmission. Textes puisés aussi bien dans la littérature "officielle" que dans la littérature "populaire".

FRAN C451 ***La littérature québécoise au féminin*** (3 crédits)
Préalable: FRAN C251. Étude des principales écrivaines québécoises. Saisie du réel et modes d'expression. Évolution de la conscience féminine. Les féminismes.

FRAN C452 ***Les écrivains québécois et la question nationale*** (3 crédits)
Préalable: FRAN C251. L'interrogation québécoise et son rapport avec la création littéraire. Situation des écrivains par rapport à la question nationale. Littérature engagée, littérature de propagande. On examinera dans ce cours aussi bien des textes "théoriques" des écrivains que des textes de "création".

FRAN C453 ***Le fantastique et la tradition populaire dans la littérature québécoise*** (3 crédits)
Préalable: FRAN C251. La présence du fantastique dans la littérature québécoise et l'influence de la tradition populaire au niveau des thèmes et des structures. Textes choisis parmi l'ensemble de la production littéraire.

FRAN C454 ***Littérature et para-littérature québécoises*** (3 crédits)
Préalable: FRAN C251. Ressemblances et différences entre l'une et l'autre littérature. Conditions de production et de diffusion. Univers représenté. Structures des oeuvres et idéologie. Textes choisis dans l'ensemble de la littérature québécoise. Guide: *Manuel de la petite littérature du Québec* de V.-L. Beaulieu.

FRAN C455 ***Littérature québécoise - Canadian Literature I*** (3 crédits)
Préalable: FRAN C251, ou autorisation du département. Etude comparée des littératures québécoise et canadienne anglaise. Comparaisons des deux littératures sur le plan thématique, stylistique, structural, idéologique, etc. Examen des similitudes, des analogies, et des traits distinctifs. L'accent dans ce cours est mis sur les oeuvres traditionnelles. Textes tels que: Grove, *Settlers of the Marsh*, et Ringuet, *Trente Arpents;* MacLennan, *The Watch that Ends the Night*, et Langevin, *Poussière sur la ville*, etc.

FRAN C456 ***Littérature québécoise - Canadian Literature II*** (3 crédits)
Préalable: FRAN C251, ou autorisation du département. Étude comparée des littératures québécoise et canadienne anglaise. Continuation du cours précédent. On mettra l'accent sur l'évolution des deux littératures depuis 1960. (Le nouveau roman québécois, etc.) Analyses thématique, idéologique, et stylistique. Ressemblances et dissemblances. Textes choisis dans les oeuvres d'Anne Hébert, de Robertson Davies, de Marie-Claire Blais, de Margaret Atwood, etc.

FRAN C460 ***Initiation à la terminologie*** (3 crédits)
Préalable: FRAN C261. Ce cours identifie certains problèmes de terminologie soulevés par la traduction et comprend des travaux pratiques tels que l'analyse lexicographique d'articles de journaux ou de revues en français ou en anglais, et la préparation de glossaires sur fiches.

FRAN C461 ***Terminologie pratique*** (3 crédits)
Préalable: FRAN C460. Ce cours fait suite à l'initiation à la terminologie. Rédaction de dossiers terminologiques, études néologiques; étude des définitions, notes, et contextes; analyse sémique.

FRAN C462 ***Histoire de la traduction*** (3 crédits)
Préalable: FRAN C261, ou autorisation du Département. Étude de textes et de traductions d'auteurs anglais et français. On étudiera l'évolution des styles et des attitudes à partir de la Renaissance jusqu'à l'époque moderne.

FRAN C463 ***Revision et correction en traduction*** (3 crédits)
Préalable: FRAN C360 ou FRAN C361. Ce cours a pour objet de faire connaître aux étudiants les aspects humains et techniques de la révision. Il abordera surtout les différentes méthodes utilisées pour évaluer la qualité d'une traduction.

FRAN C464 ***Stage de formation: du français à l'anglais*** (6 crédits)
Préalable: 3ème année dans le programme de traduction. Le stage a pour but d'initier l'étudiant à l'activité professionnelle dans le domaine de la traduction du français à l'anglais et de lui faire connaître le monde du travail.

FRAN C465 ***Stage de formation: de l'anglais au français*** (6 crédits)
Préalable: 3ème année dans le programme de traduction. Le stage a pour but d'initier l'étudiant à l'activité professionnelle dans le domaine de la traduction de l'anglais au français et de lui faire connaître le monde du travail.

FRAN C466 ***La langue française au Québec: son évolution*** (3 crédits)
Préalable: FRAN C251 et autorisation du département. Aperçu de l'évolution du français sur le territoire québécois; influences internes et externes. Étude des rapports entre l'évolution politique et économique du Québec et celle de la langue par la consultation de documents provenant d'époques successives.

FRAN C467 ***La langue française au Québec: son état actuel*** (3 crédits)
Préalable: FRAN C262 ou l'équivalent. Analyse des aspects phonétiques, lexicaux, et morpho-syntaxiques du français québécois actuel et des divergences de ce dernier par rapport à la norme européenne: archaïsmes, anglicismes, créations nouvelles. La question des niveaux de langue (aspects sociaux et linguistiques) et celle de la norme seront également abordées.

FRAN C468 ***Étude de la norme*** (3 crédits)
Préalable: FRAN C262 ou l'équivalent. Étude des facteurs politiques, sociologiques, et psychologiques contribuant à la notion de la norme. Analyse et description des écarts par rapport à la norme. Travaux pratiques d'enquête.

FRAN C469 ***Sémantique*** (3 crédits)
Préalable: FRAN C262. Étude formelle de la signification et de la segmentation du sens en français fondée sur une approche sémiotique de la langue. L'étudiant fera l'apprentissage de méthodes d'analyse lui permettant d'inventorier les effets de sens et de les ordonner en fonction de critères objectifs.

FRAN C470 ***Traduction littéraire avancée: du français à l'anglais*** (3 crédits)
Préalable: FRAN C360 ou autorisation du département. Étude des différents principes et des différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques: analyse critique et comparaison d'une traduction et de son original; traduction de textes français choisis par le professeur.

FRAN C471 ***Traduction littéraire avancée: de l'anglais au français*** (3 crédits)
Préalable: FRAN C360 ou autorisation du département. Étude des différents principes et des

différentes techniques de la traduction littéraire; aperçu de la traduction littéraire au Canada. Travaux pratiques: analyse critique et comparaison d'une traduction et de son original; traduction de textes anglais choisis par le professeur.

FRAN C472 ***Le théâtre français du XXème siècle I*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. À la fin du XIXème siècle, le théâtre français connut des transformations profondes. Ce cours suivra l'évolution du théâtre à partir d'Antoine, à travers ses étapes successives, jusqu'à la fin de la période de l'entre-deux-guerres. Seront étudiés les grands metteurs en scène qui ont succédé à Antoine: Lugné-Poe, Copeau et le Cartel, ainsi que les mouvements d'idées et les dramaturges qui ont marqué cette période.

FRAN C473 ***Le théâtre français du XXème siècle II*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. La guerre de 1939-1945 marque une coupure dans l'histoire du théâtre en France au XXème siècle. La relève du Cartel est assurée par des animateurs tels que Jean-Louis Barrault, Jean Vilar, Roger Planchon, etc. De nouvelles lignes de force se dégagent. Seront étudiés, entre autres, des représentants du théâtre politique, du théâtre de l'Absurde, et du théâtre nouveau qui se développe à la suite des événements de mai 1968.

FRAN C476 ***La littérature au féminin I*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. À partir de manifestes et d'oeuvres de création, on retracera différentes manifestations de la prise de conscience "féministe" chez les écrivaines françaises, ainsi que les solutions envisagées aux problèmes posés. Ce cours permettra de considérer les tendances actuelles dans une perspective historique.

FRAN C477 ***La littérature au féminin II*** (3 crédits)
Préalable: 12 crédits parmi les suivants: FRAN C302[3] et C303[3], C270[3] et C271[3], C324[6], C320[6] ou C321[3] et C322[3] ou autorisation du Département. Ce cours portera sur l'éclatement qui caractérise l'écriture au féminin à l'heure actuelle. On étudiera différents concepts tels que la "prise de parole", la valorisation de *l'anima*, le renversement des mythes anciens, ainsi que la révolution formelle et stylistique qui accompagne cet éclatement.

FRAN C478 ***Histoire de la critique littéraire*** (3 crédits)
Préalable: 6 crédits en littérature. Étude de l'évolution de la critique littéraire des origines au début du XXème siècle, au moyen d'un choix d'oeuvres théoriques et critiques.

FRAN C480 ***Approches critiques I: la sémiotique textuelle*** (3 crédits)
Préalable: 6 crédits en littérature. Étude des conditions générales de la production du sens et de la spécificité du texte littéraire. Examen des principales théories formalistes en France et au Québec et apprentissage des méthodes critiques qui en découlent. Travaux pratiques qui permettront à l'étudiant d'en contrôler l'efficacité et la valeur au contact des oeuvres.

FRAN C481 ***Approches critiques II: la sociologie de la littérature*** (3 crédits)
Préalable: 6 crédits en littérature. Étude des relations qu'entretiennent entre eux le littéraire et le social. Le point de vue résolument sociologique que l'on adoptera dans ce cours permettra d'étudier l'oeuvre en fonction du milieu qui en a permis l'émergence et du contexte socio-idéologique dont elle est à la fois un reflet et un élément actif.

FRAN C482 ***Approches critiques III: la critique philosophique*** (3 crédits)
Préalable: 6 crédits en littérature. Ce cours vise à sensibiliser l'étudiant aux problèmes épistémologiques que pose l'étude d'un texte littéraire. La critique philosophique, essentiellement thématique, doit constamment remettre en question ses présupposés théoriques et tenter de justifier sa méthode. Quelles sont les conditions d'un discours véridique prenant en charge le texte littéraire, quelle est la signification du texte littéraire considéré comme signe global, telles sont les deux principales questions qui seront examinées.

FRAN C483 ***Approches critiques IV: la psycho-critique*** (3 crédits)
Préalable: 6 crédits en littérature. Ce cours est une introduction à la psychanalyse de la littérature. Axé sur le créateur et sur ses rapports avec sa création, il permettra à l'étudiant de faire le point sur les différentes méthodes psychocritiques et sur leurs applications. Par des travaux pratiques d'interprétation portant sur des oeuvres particulières, on évaluera les avantages de chaque méthode et on en précisera les limites.

FRAN C488 ***Stage pratique d'enseignement du français langue seconde aux adultes*** (3 crédits)
Préalable: FRAN C381 et 9 autres crédits dans le programme du Certificat d'enseignement du français langue seconde aux adultes, ou permission du directeur/directrice du programme. Les étudiants auront l'occasion d'observer des professeurs expérimentés en assistant à leurs cours et devront eux-mêmes appliquer les connaissances acquises dans les autres cours du programme à un enseignement pratique dans une classe.

FRAN C489 ***Méthodologie des travaux de recherche*** (6 crédits)
Préalable: FRAN C324; FRAN C367 ou FRAN C401. Destiné aux étudiants de dernière année et

préparant aux études du deuxième cycle, ce cours permettra, par des exercices de rédaction commentés et critiqués, d'atteindre la précision, l'élégance, et l'originalité dans l'expression écrite. Analyse stylistique proprement dite (définitions et procédés de style). Théorie et pratique de l'analyse de texte - Théorie de la versification - Théorie et pratique des recherches bibliographiques.

FRAN C490 ***Tutorat en langue, linguistique ou traduction*** (6 crédits)
Préalable: 12 crédits de langue, de linguistique ou de traduction au niveau "400". Étude d'un sujet particulier dans le domaine de la langue, de la linguistique ou de la traduction.
NOTE: Tout étudiant s'inscrivant pour la seconde fois au cours FRAN C490 obtient les crédits FRAN C491 et C492.

FRAN C491 ***Tutorat en langue, linguistique ou traduction*** (3 crédits)
Préalable: 12 crédits de langue, de linguistique ou de traduction au niveau "400". Étude d'un sujet particulier dans le domaine de la langue, de la linguistique ou de la traduction.

FRAN C492 ***Tutorat en langue, linguistique ou traduction*** (3 crédits)
Préalable: 12 crédits de langue, de linguistique ou de traduction au niveau "400". Étude d'un sujet particulier dans le domaine de la langue, de la linguistique ou de la traduction.
NOTE: Tout étudiant s'inscrivant pour la seconde fois au cours FRAN C491 obtient les crédits FRAN C492.

FRAN C493 ***Tutorat en littérature*** (6 crédits)
Préalable: 12 crédits en littérature dont 6 au niveau "400". Étude d'un sujet particulier dans le domaine de la littérature.
NOTE: Tout étudiant s'inscrivant pour la seconde fois au cours FRAN C493 obtient les crédits FRAN C494 et C495.

FRAN C494 ***Tutorat en littérature*** (3 crédits)
Préalable: 12 crédits en littérature dont 6 au niveau "400". Étude d'un sujet particulier dans le domaine de la littérature.

FRAN C495 ***Tutorat en littérature*** (3 crédits)
Préalable: 12 crédits en littérature dont 6 au niveau "400". Étude d'un sujet particulier dans le domaine de la littérature.
NOTE: Tout étudiant s'inscrivant pour la seconde fois au cours FRAN C494 obtient les crédits FRAN C495.

FRAN C496 ***Recherche dirigée*** (6 crédits)
Préalable: 12 crédits dans la spécialité dont 6 au niveau "400". Ce cours n'est ouvert qu'aux étudiants des programmes de majeure, de spécialisation, ou d'honneurs. Il offre l'occasion d'approdondir l'étude d'un sujet à déterminer par l'étudiant en accord avec son conseiller et/ou un professeur du département. Chaque étudiant exécute des travaux individuels sous le contrôle du professeur spécialiste de la matière.

FRAN C497 ***Recherche dirigée*** (6 crédits)
Tout étudiant s'inscrivant pour la seconde fois au cours FRAN C496 obtient les crédits FRAN C497.

FRAN 498 ***Étude avancée d'un sujet particulier*** (3 crédits)

FRAN 499 ***Études avancée d'un sujet particulier*** (6 crédits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.120 Exercise Science

Chairman
W.R. SELLERS, *Associate Professor*

Associate Professors
E.F. ENOS
L.W. JANKOWSKI
R.B. SWEDBURG

Assistant Professors
D.L. PARIS
S.J. SULLIVAN

Adjunct Assistant Professors
L.P. COUGHLIN
S. ELMAN
B. GAMBERG
I. ROHAN
J.I. SCHULTZ
J.D. SULLIVAN

Programmes and courses formerly offered under the title of Bio-Physical Education will now be offered as Exercise Science. All courses previously entitled Bio-Physical Education (BIOP) will in future be entitled Exercise Science (EXCI).

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

69 Specialization in Exercise Science: Sports Science Option

Stage I
6 CHEM C221[3], C222[3]
15 EXCI C201[3], C253[3], C255[3], C261[3], C262[3]
3 BIOL C203[3]
3 MATH C207[3]

Stage II
21 EXCI C311[3], C317[3], C321[3], C335[3], C336[3], C353[3], C357[3]
3 PHYS C241[3]

Stage III
18 EXCI C436[3], C451[3], C453[6], C460[6]

63 Specialization in Exercise Science: Therapeutic Activity Option

Stage I
6 CHEM C221[3], C222[3]
12 EXCI C201[3], C253[3], C255[3], C261[3]
3 MATH C207[3]

Stage II
15 EXCI C311[3], C317[3], C321[3], C353[3], C357[3]

Stage III
21 EXCI C403[3], C404[3], C451[3], C453[6], C463[6]
6 credits chosen from EXCI C215[3], C262[3], C309[3], C455[3]

65 Specialization in Exercise Science: Pre-Research Option

Stage I
6 CHEM C221[3], C222[3]
12 EXCI C201[3], C253[3], C255[3], C261[3]
3 BIOL C222[3]
3 COMP C211[3]

Stage II
15 EXCI C311[3], C317[3], C321[3], C353[3], C357[3]
3 CHEM C271[3]
2 PHYS C295[2]

Stage III
21 EXCI C411[3], C417[3], C451[3], C453[6], C468[6]

66 Specialization in Exercise Science: Community Fitness Science Option

Stage I
6 CHEM C221[3], C222[3]
18 EXCI C201[3], C215[3], C253[3], C255[3], C261[3], C262[3]
3 MATH C207[3]

Stage II
21 EXCI C309[3], C311[3], C317[3], C321[3], C353[3], C357[3], C361[3]

Stage III
18 EXCI C451[3], C453[6], C455[3], C461[6]

45 Major in Exercise Science

Stage I
6 CHEM C221[3], C222[3]
3 MATH C207[3]
12 EXCI C201[3], C253[3], C255[3], C261[3]

Stage II
15 EXCI C311[3], C317[3], C351[3], C353[3], C357[3]

Stage III
9 EXCI C451[3], C453[6]

***30 Certificate in Outdoor Education**

18 EXCI C370[6], C470[6], C472[6]
12 Elective credits chosen in consultation with the Coordinator of the Certificate Programme.

**NOTE: Acceptance into certificate programme is dependent upon possession of Bachelor's degree by applicant or graduation from the three-year CEGEP programme no. 391 (Recreation).*

Students may transfer into the Certificate programme up to six credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Leisure Studies

The courses listed below, and fully described in §31.185, are open to all students, in particular Exercise Science students desiring increased competency in the field of Leisure Studies.

LESR C241[3], C342[6], C426[6], C464[6]

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

EXCI C201 ***Introduction to Exercise Science*** (3 credits)
Prerequisite: Enrolment in an Exercise Science programme. The course examines from an historical perspective the philosophical and applied concepts of Exercise Science. There is particular emphasis on the development of the relationship between Exercise Science and the allied health professions. Lectures.
NOTE: Students who have received credit for BIOP C201 may not take this course for credit.

EXCI C215 ***Psychomotor Learning and Eurhythmics in Early Childhood Curriculum*** (3 credits)
The course examines the psychomotor domain of learning in young children. Application of perceptual motor processes to motor learning in the early childhood curriculum are analyzed. Special consideration is given to the use of rhythmic activities as a learning mode. Lectures, laboratories.
NOTE: Students who have received credit for BIOP C413 and C415 (1979-80, 1980-81); EXCI C315 and C415 (1981-82) or EXCI C316 and C413 (1982-83) may not take this course for credit.

EXCI C251 ***Basics of the Science of Movement*** (3 credits)
Anatomical, physiological and kinesiological aspects of movement are presented. Acute and chronic responses to exercise and the development of fitness programmes are studied. Detrimental as well as beneficial responses are considered. Lectures and laboratories.
NOTE: Students registered in the Major and Specialization programmes in Exercise Science may not take this course for credit.

EXCI C253 ***Structural Human Anatomy*** (3 credits)
Prerequisite: Enrolment in an Exercise Science programme. The concentration of this course will be on the appendicular skeleton. The skeletal and muscular systems of the body, particularly of the upper and lower extremities, are studied in depth. The circulatory and neurological systmes of these areas are also presented to better understand the complete relationships for subsequent study in core courses in Exercise Science. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C351 or EXCI C351 may not take this course for credit.

EXCI C255 ***Systemic Human Anatomy*** (3 credits)
Prerequisite: EXCI C253. The major areas of emphasis in this course are the nervous, cardiovascular, and respiratory systems. However, thorough coverage will be given to the digestive, urinary and reproductive systems. This course provides the foundation for subsequent study in Exercise Science. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C355 or EXCI C355 may not take this course for credit.

EXCI C261 ***Principles of Physical Conditioning*** (3 credits)
The major thrust of this course is a practical experience in adult physical activities, e.g., industrial fitness. This includes a conditioning as well as a skill development component. Lectures and special projects relate the physical activities to theoretical concepts. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C261 may not take this course for credit.
This course was first offered in the present form in the 1981-82 academic year.

EXCI C262 ***Emergency Care of Athletic Injuries*** (3 credits)
Prerequisite: EXCI C253. This course identifies common injuries and chronic pathological conditions associated with physical activity. Students learn to recognize the injury and perform emergency or initial treatment. The "how" and "why" of emergency treatment including CPR is covered. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C337 or EXCI C337 may not take this course for credit.

EXCI 298 ***Selected Topics in Exercise Science*** (3 credits)

EXCI 299 ***Selected Topics in Exercise Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

EXCI C309 ***Play, Sport, and Recreation Skills for Children*** (3 credits)
Prerequisite: EXCI C261. Interests, characteristics and physical activity needs of children are examined. Basic skills, progressions and appropriate teaching/learning strategies are reviewed.

Lectures, laboratories.
NOTE: Students who have received credit for BIOP C310 and EXCI C310 may not take this course for credit.

EXCI C311 ***Introduction to Psychomotor Behaviour*** (3 credits)
Prerequisite: MATH C207. This course will examine the acquisition and performance of skilled motor behaviour. An information processing model will be used to identify the major mechanisms involved in the production of skilled movement. Lectures, laboratories.
NOTE: Students who have received credit for BIOP C211 or EXCI C211 may not take this course for credit.

EXCI C317 ***Neural Control of Human Movement*** (3 credits)
Prerequisite: EXCI C253; EXCI C311; EXCI C353. This course examines the major neural mechanisms involved in the control of posture and movement. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C313 or EXCI C313 may not take this course for credit.

EXCI C321 ***Measurement and Analysis in Exercise Science*** (3 credits)
Prerequisite: MATH C207; EXCI C261. Measurement Theories and techniques as they relate to Exercise Science will be covered in this course. Concepts of reliability and validity are introduced. Practical application of statistical tests and methods for presenting data are covered. Lectures and laboratories.

EXCI C331 ***Health Science*** (3 credits)
The subject matter is approached with "health" viewed as the optimal functioning of the human organism. The course synthesizes and applies knowledge from biological, epidemiological, and medical sciences to furnish a comprehensive understanding of factors which influence health such as: human sexuality, nutrition, fitness and disease processes. Lectures.
NOTE: Students who have received credit for BIOP C331 may not take this course for credit.

EXCI C333 ***Personal and Community Health Problems*** (3 credits)
The course examines causes and symptoms and proposes solutions to individual and community health problems. Problems considered include: alcoholism, drug abuse, sex education and industrial and occupational health hazards. Lectures, seminars.
NOTE: Students who have received credit for BIOP C333 may not take this course for credit.

EXCI C335 ***Prevention and Care of Athletic Injuries*** (3 credits)
Prerequisite: EXCI C253; EXCI C262. This course examines the pathologies of acute injuries and chronic conditions associated with physical activity. Basic techniques in the recognition and management of common injuries are discussed. Preventive methods which can be used to reduce the risk of injury are presented. These include physical conditioning, hazard recognition, prophylactic taping and protective apparel. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C335 may not take this course for credit.

EXCI C336 ***Rehabilitation of Athletic Injuries*** (3 credits)
Prerequisite: EXCI C335. This course will examine the use of several therapeutic modalities including thermal and cryotherapy, hydrotherapy, ultraonditions associated with physical activity. Students learn to recognize tniques will be discussed. Surgical techniques are presented as are rehabilitation programmes for various injuries. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C433 or EXCI C433 may not take this course for credit.

EXCI C353 ***Human Physiology*** (3 credits)
Prerequisite: CHEM C222; EXCI C255. This course introduces the student to the functional organization of the human body. Cell physiology, metabolism, thermoregulation, endocrine function, reproduction, neural and muscular physiology are presented. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C353 may not take this course for credit.

EXCI C357 ***Cardiovascular-Respiratory Physiology*** (3 credits)
Prerequisite: EXCI C353. This course introduces the student to those mechanisms and systems which are of primary importance in the metabolic processes of exercise. The function of renal, cardiac, circulatory and respiratory physiology are detailed. Lectures, laboratories.
NOTE: Students who have received credit for BIOP C357 may not take this course for credit.

EXCI C361 ***Exercise Leadership*** (3 credits)
Prerequisite: EXCI C261. This course will provide students with the opportunity to develop, administer, supervise and evaluate exercise programmes for a variety of populations in community and institutional settings. Lectures and laboratories.

EXCI C370 ***Outdoor Recreation and Leadership*** (6 credits)
This course focuses on using and understanding the environment as a setting for recreation. Learning by experience is emphasized. Potential leaders and administrators in outdoor recreation or outdoor education will find this course of value. Lectures, laboratories: weekend field trips to be arranged.
NOTE: Students who have received credit for BIOP C370 and EXCI C470 (81-82) may not take this course for credit.

EXCI 398 ***Selected Topics in Exercise Science*** (3 credits)

EXCI 399 ***Selected Topics in Exercise Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

EXCI C403 ***Therapeutic Role of Movement*** (3 credits)
Prerequisite: EXCI C357 The course introduces the student to the technique of modifying physical activities and sports to the needs of the handicapped. Rationale and methods of providing exercise for individuals with specific permanent disabilities and chronic physical or mental deficiencies are emphasized. Assignments will require practical experience. Lectures.
NOTE: Students who have received credit for BIOP C402 or EXCI C402 may not take this course for credit.

EXCI C404 ***Therapeutic Exercise Physiology*** (3 credits)
Prerequisite: EXCI C403. The course introduces the student to the role and use of exercise in the treatment of specific physiopathologies. Metabolic syndromes, cardiovascular diseases and respiratory disorders in which therapeutic exercise is either beneficial or contraindicated are emphasized. Lectures.
NOTE: Students who have taken BIOP C401 or EXCI C401 may not take this course for credit.

EXCI C411 ***Research Design*** (3 credits)
Prerequisite: MATH C207 or the equivalent; EXCI C357, recommended to be concurrent with EXCI C453; EXCI C468. Through lectures and laboratory experience, students will be exposed to various research designs including: descriptive survey, historical survey, experimental and analytical design. Presentation and interpretation of data as well as guidelines for writing a research paper will be covered. Lectures, seminars and laboratories.
NOTE: Students who have received credit for BIOP C411 may not take this course for credit.

EXCI C412 ***Advanced Methods and Materials in Physical Education and Recreation*** (6 credits)
Prerequisite: Third-year standing and consent of instructor. The interactive behaviour between student and teacher is approached scientifically. Among topics considered are history and philosophy of physical education, modern trends in education and their adaptation to the physical education field, Mosston's spectrum of styles, T.E.T. (Teacher Effectiveness Training), learning performance criteria, pupil's perception of teacher influence, behavioural objectives, values clarification, leadership theory, curriculum and daily lesson planning. In the laboratory periods, students are given the opportunity to practise various methodological techniques on peers and on adolescents and young adults in academic or recreational settings.
NOTE: Students who have received credit for BIOP C412 may not take this course for credit.

EXCI C417 ***Electromyographic Kinesiology*** (3 credits)
Prerequisite: EXCI C317; EXCI C451. This course examines fundamental concepts of electromyography and the use of electromyographical techniques to investigate selected aspects of normal and pathological movement. Lectures and laboratories.

EXCI C421 ***Administration of Physical Education Programmes*** (3 credits)
The course examines fundamental concepts of sports administration and management. Organizational structures of intramural and interscholastic programmes are examined. Budget, facilities management, legal responsibilities and public relations are covered. These are applied to both the public and the private sector. Lectures and seminars.
NOTE: Students who have received credit for BIOP C421 may not take this course for credit.

EXCI C436 ***Sports Medicine*** (3 credits)
Prerequisite: EXCI C336; EXCI C357. Selected topics from the current literature dealing with health oriented aspects of involvement in sport will be examined. Lectures and seminars.
NOTE: Students who have received credit for BIOP C436 may not take this course for credit.

EXCI C451 ***Kinesiology*** (3 credits)
Prerequisite: EXCI C253; EXCI C317; also recommended is PHYS C241. This course concentrates on the mechanical principles pertinent to an understanding of human movement performance. Fundamental principles of mechanics involved in the kinematics and kinetic analysis of basic human movement and their applications are covered. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C451 may not take this course for credit.

EXCI C453 ***Physiology of Exercise*** (6 credits)
Prerequisite: EXCI C357; EXCI C317. The physiology of man's acute and chronic adaption to physical activity is examined. Factors affecting muscle strength, cardiorespiratory endurance and other components of fitness are studied. Criteria for exercise prescription and the effects of training are also presented. Laboratory techniques for the assessment of performance are emphasized. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C453 may not take this course for credit.

EXCI C455 ***Preventive Medicine and Geriatrics*** (3 credits)
Prerequisite: EXCI C357 or permission of the Department, recommended to be concurrent with EXCI C453. This course examines the role of physical activity as it relates to the physiological, psychological and sociological needs which accompany the aging process. Activities are explored in view of their preventive, rehabilitative and/or adaptive benefit to the aged population. Lectures and laboratories.
NOTE: Students who have received credit for BIOP C455 may not take this course for credit.

EXCI C460 ***Sports Science Internship*** (6 credits)
Prerequisite: This course is open to students with advanced standing enrolled in the Sports Science Option. This course offers a supervised period of work in a rehabilitation or athletic therapy clinic. This course involves a commitment of 240 hours including a weekly seminar.
NOTE: Students who have received credit for BIOP C462 or EXCI C462 may not take this course for credit.

EXCI C461 ***Community Fitness Science Internship*** (6 credits)
Prerequisite: This course is open to students with advanced standing in the Community Fitness Science Option. This course offers a supervised period of work in a fitness programme/centre or similar facility. The course involves a commitment of 240 hours including a weekly seminar.

EXCI C463 ***Therapeutic Activity Internship*** (6 credits)
Prerequisite: This course is open to students with advanced standing in Exercise Science enrolled in the Therapeutic Activity Option. The course offers a supervised period of work as activity leader or exercise technician in a hospital or rehabilitation centre or similar institution, a technician assisting in physiological evaluation or a related position. The course involves a commitment of 240 hours including a weekly seminar.
NOTE: Students who have received credit for BIOP C466 or EXCI C466 may not take this course for credit.

EXCI C468 ***Research Internship*** (6 credits)
Prerequisite: This course is open to students with advanced standing in Exercise Science enrolled in the Pre-Research Option. In consultation with a faculty supervisor, students are given the opportunity to study theoretical, practical and scientific problems in the field of Exercise Science. Students will participate in experiments under close supervision of a faculty adviser. At the conclusion of these experiments the student will prepare a report and make a verbal presentation of the findings. The course involves a commitment of 240 hours including a weekly seminar.
NOTE: Students who have received credit for BIOP C468 may not take this course for credit.

EXCI C470 ***Scientific Principles of Outdoor Education*** (6 credits)
The course offers a comprehensive analysis of outdoor education. The aims and objectives of outdoor education are examined; organization and administration of model programmes are analyzed; innovative units of instruction and outdoor education programmes are evaluated. Students will plan, teach and participate in outdoor learning experiences. Lectures, laboratories, seminars and field study.
NOTE: Students who have received credit for BIOP C470 and EXCI C370 (81/82) may not take this course for credit.

EXCI C472 ***Outdoor Education - Administration and Implementation*** (6 credits)
The course explores use of the out-of-doors to enrich the school curriculum. In addition, outdoor education as a strategy in the wider context of education is examined. Students will receive instruction in skills necessary for planning, administering and implementing outdoor education programmes. The philosophical base for this educational approach will be assessed, particularly as it pertains to interdisciplinary methods in the elementary and high school curricula. Field study and laboratories will supplement classroom instruction. 3-4 week intensive summer course. Alternate summers.
NOTE: Students who have received credit for BIOP C472 may not take this course for credit.

EXCI C491 ***Independent Study in Exercise Science*** (6 credits)
Prerequisite: Permission of the Department. Students will work on topic(s) chosen in consultation with their department supervisor. The study can include readings, field studies, interviews, and field work. An in-depth report of the activities conducted by the student will be presented to the supervisor upon completion of the course.
NOTE: Students who have received credit for BIOP C491 may not take this course for credit.

EXCI 498 ***Advanced Topics in Exercise Science*** (3 credits)

EXCI 499 ***Advanced Topics in Exercise Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.130 Geography

Chairman
I.M. BARLOW, *Associate Professor*

Associate Professors
S.R. AIKEN
D.B. FROST
M. MARSDEN
A. MELAMED
B. SLACK
P.A. THORNTON
J.W. YOUNG

Assistant Professor
J.M. ANDERSON

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

60 BA Honours in Geography

Pattern A: Physical Geography

Stage I
15 GEOG C211[6], C267[3], C271[6]
Stage II & III
9 GEOG C347[3], C361[3], C362[3]
12 Chosen from GEOG C371[6], C372[6], C373[6]
Stage III
12 GEOG C369[3], C391[3], C491[6]
6 400-level GEOG credits chosen with approval of Geography adviser
3 Elective credits in Geography at the 300-400 level
3 Non-Geography elective credits approved by the Department

Pattern B: Human Geography
Students may emphasize one of the following areas: Cultural-Historical or Economic-Urban.

Stage I
15 GEOG C211[6], C267[3], C271[6]
Stage II & III
9 GEOG C347[3], C361[3], C362[3]
12 *Cultural-Historical:* GEOG C312[3], C315[3], C317[3], C325[3]
or
Economic-Urban: GEOG C331[6], C358[3], C359[3]
Stage III
12 GEOG C369[3], C391[3], C491[6]
6 400-level GEOG credits chosen with approval of Geography adviser
3 Elective credits in Geography at the 300-400 level
3 Non-Geography elective credits approved by the Department

60 BA Specialization in Geography

Pattern A: Physical Geography

Stage I
15 GEOG C211[6], C267[3], C271[6]
Stage II
9 GEOG C347[3], C361[3], C362[3]
12 Chosen from GEOG C371[6], C372[6], C373[6]
Stage III
6 GEOG C369[3], C391[3]
6 400-level GEOG credits chosen with approval of Geography adviser
9 Elective credits in Geography at the 300-400 level
3 Non-Geography elective credits approved by the Department

Pattern B: Human Geography
Students may emphasize one of the following areas: Cultural-Historical or Economic-Urban

Stage I
15 GEOG C211[6], C267[3], C271[6]
Stage II
9 GEOG C347[3], C361[3], C362[3]
12 *Cultural-Historical:* GEOG C312[3], C315[3], C317[3], C325[3]
or
Economic-Urban: GEOG C331[6], C358[3], C359[3]
Stage III
6 GEOG C369[3], C391[3]
6 400-level GEOG credits chosen with approval of Geography adviser
9 Elective credits in Geography at the 300-400 level
3 Non-Geography elective credits approved by the Department

75 BSc Specialization in Resource Analysis and Land Use
See Section 31.140, Geology

42 BA Major in Geography
Stage I
15 GEOG C211[6], C267[3], C271[6]

Stage II
9 GEOG C347[3], C361[3], C362[3]
Stage III
15 GEOG elective credits at the 300-400 level
3 Non-Geography elective credits approved by the Department

60 BA Specialization in Man-Environment Relationships
Stage I
15 GEOG C211[6], C267[3], C275[3], C276[3]
Stage II
12 GEOG C305[6], C361[3], C362[3]
Stage III
6 GEOG C405[6]
Stages II and III
27 Chosen from List A and List B including at least 6 credits and no more than 24 credits in Geography. No more than 6 credits may be at the 200 level.

List A
GEOG C371[6]*, C372[6]*, C470[3]
BIOL C207[3], C240[3], C250[3], C345[3]*, C351[3]*, C352[3]*, C353[3]*, C355[3]*, C450[3]*, C454[3]*, C458[3]*, C459[3]*
CHEM C302[2], C303[2], C380[2]
GEOL C332[3]*, C424[3]
PHYS C270[3], C273[3]*
List B
GEOG C315[3]*, C317[3]*, C357[6]*, C410[3]
ECON C391[3]*, C396[3]*
POLI C361[3], C363[3], C421[3], C461[3]*, C462[6], C465[3]
SOCI C323[3]*, C324[3]*, C326[6]*
SCHA C253[3], C254[3]

**These courses have prerequisites which are not included in these lists. Please consult the calendar.*

42 BA Major in Man-Environment Relationships
Stage I
15 GEOG C211[6], C267[3], C275[3], C276[3]
3 Non-GEOG electives approved by an adviser
Stage II
6 GEOG C305[6]
6 GEOG C371[6], C372[6]
Stage III
6 GEOG C405[6]
6 Chosen from GEOG C315[3], C317[3], C352[3], C353[3], C357[6]

30 BA Minor in Geography
12 GEOG C211[6], C271[6]
3 GEOG C267[3]
15 GEOG Elective credits at the '300' or '400' level

66 BSc Specialization in Geography
15 GEOG C211[6], C267[3], C271[6]
12 Chosen from GEOG C371[6], C372[6], C373[6], C462[3], C475[3], C476[3], 498[3]
39 Chosen from one of the following groups: Environmental Geography, Hydrology, Geoscience. Selection of a coherent programme must be made in consultation with the departmental adviser. No more than 27 may be Geography credits.

ENVIRONMENTAL GEOGRAPHY
GEOG C362[3], C371[6], C372[6], C373[6], 498[3]
BIOL C240[3], C242[3], C246[3], C250[3], C351[3], C352[3], C353[3], C355[3], C450[3], C458[3]
PHYS C243[3], C244[3], C273[3], C291[1], C292[1]
GEOL C212[3]
MATH C210[3], C271[3], C310[3], C371[3]

HYDROLOGY
GEOG C362[3], C372[6], C373[6], C476[3]
BIOL C240[3], C250[3], C355[3], C450[3]
CHEM C282[2]
GEOL C210[3], C213[3], C224[3]
MATH C210[3], C261[6], C271[3], C371[3]
PHYS C243[3], C244[3], C291[1], C434[3], C494[1]

GEOSCIENCE
GEOG C362[3], C372[6], C373[6], C475[3], C476[3]
GEOL C210[3], C213[3], C224[3], C231[3], C314[3], C413[3], C421[3], C422[3], C424[3], C425[3]
MATH C261[6], C271[3], C371[3]
PHYS C243[3], C244[3], C291[1], C292[1], C434[3], C494[1]

NOTE: Many non-Geography courses require prerequisites that are not part of the Geography Programme.

42 BSc Major in Geography
9 GEOG C267[3], C271[6]
12 Chosen from GEOG C371[6], C372[6], C373[6], C462[3], C475[3], C476[3], 498[3]
21 Chosen from one of the three groups listed under Specialization in Geography: Environmental Geography, Hydrology, Geoscience. Selection of coherent programmes must be made in consultation with a departmental adviser. No more than 15 may be Geography credits.

30 BSc Minor in Geography
9 GEOG C267[3], C271[6]
12 Chosen from GEOG C371[6], C372[6], C373[6], C462[3], C475[3], C476[3], 498[3]
9 Chosen from one of the three groups listed under Specialization in Geography: Environmental Geography, Hydrology, Geoscience. Selection of coherent programmes must be made in consultation with a departmental adviser. No more than 3 may be Geography credits.

Students in programmes leading to the B.Sc. degree may take the courses in Geography listed below for credits to be applied to their programme of concentration.

GEOG C267 Introductory Cartography (3 credits)

GEOG C271 The Natural Environment (6 credits)

GEOG C362 Quantitative Geography I (3 credits)

GEOG C366 Intermediate Cartography (3 credits)

GEOG C371 Biogeography (6 credits)

GEOG C372 Analysis of the Environment (6 credits)

GEOG C373 Climatology (6 credits)

GEOG C462 Advanced Cartography (3 credits)

GEOG C475 Hydrology I (3 credits)

GEOG C476 Hydrology II (3 credits)

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

GEOG C200 ***Foundations of Geography: Environment and Man*** (6 credits)
A course designed for the student with no previous training who is interested in the geographic background to world and environmental problems. A study will be made of both physical and human factors in geography. Areas of concentration will be: energy, natural systems, and the environment; landscape evolution, climate, and resources; variation and spatial distribution of man's economic, social, and political activities; the relationship of urban and non-urban man to the environment.

GEOG C202 ***Ecology of Man*** (3 credits)
A general introduction to the relationship between physical and cultural distributions on the earth's surface. Global patterns of human, economic and natural resources will be examined.

GEOG C211 ***Introduction to Human Geography*** (6 credits)
A study of the evolution of the earth's populated areas and the gradual enlargement of geographical horizons. The emphasis will be on cultural distributions, landscape and settlement, and the geography of economic, social, and political activities.

GEOG C267 ***Introductory Cartography*** (3 credits)
This course offers a broad overview of the nature and scope of cartography. An examination of the compilation and design of topographic and thematic maps provides insight into the strengths and limitations of maps as vehicles for representing spatial information. Assignments of a practical nature complementary to the lectures form an integral part of the course.
NOTE:Students who have received credit for GEOG C262 may not take this course for credit.

GEOG C271 ***The Natural Environment*** (6 credits)
An introduction to the earth sciences as they relate to the environment of Man, with special emphasis on weather, climate, and the evolution of landscape.
NOTE: Students who have received credit for either GEOG C275 or C276 may not take this course for credit.

GEOG C273 ***The Sea*** (6 credits)
A physical, historical, and human geography of the world ocean. The course includes an introduction to oceanography, navigation, and elementary geophysics, as well as an account of travels and discovery ending with modern scientific exploration of the deeps. Topics include coasts and islands; ports, ships, and shipping; submarine topography; waves, tides, and earthquakes; marine life, fish, and fisheries.

GEOG C275 ***Climate and the Biosphere*** (3 credits)
A study of the energy systems of the atmosphere and an introduction to environmental geography. The hydrologic cycle, world climates, and weather systems. Interrelationships in the biosphere and man's impact upon them. Weather and climate maps will also be studied. Lectures: 3 hours per week, including laboratory.
NOTE: Students who have received credit for GEOG C271 may not take this course for credit.

GEOG C276 ***Landforms and the Biosphere*** (3 credits)
GEOG C275 a help. An introduction to the energy systems of the earth's crust and oceans, and the processes that have shaped our environment. The evolution of land forms and man's impact upon landscapes. The Pleistocene and Recent epochs in Canada, and their effects on soils and land use. The study of relevant topographic land-use maps and aerial photographs. Lectures: 3 hours per week, including laboratory.
NOTE: Students who have received credit for GEOG C271 may not take this course for credit.

GEOG 298 ***Selected Topics in Geography*** (3 credits)

GEOG 299 ***Selected Topics in Geography*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable and the Geography Course Guide.

GEOG C305 ***Tutorial in Man-Environment Relationships I*** (6 credits)
Prerequisite: 18 credits in Geography. Tutorial discussion of the changing human attitudes to nature, perception of the environment, and of the impact of environmental factors on Man and culture.

GEOG C312 ***Political Geography*** (3 credits)
Prerequisite: GEOG C211 or permission of the Department. The course will be structured around traditional and contemporary themes in political geography. Emphasis will be on the political/administrative organization of space, the interrelationships between politics and environment, electoral geography, and the geographical aspects of public policy.

GEOG C313 ***Montreal: Habitat and Society*** (6 credits)
Prerequisite: GEOG C211, or permission of the Department. The course is an introduction to the urban geography of Montreal, both past and present. Three themes are investigated. They are: (a) 'habitat': the biophysical environment of the site, the growth of the physical fabric of the city, and the evolution of its architectural forms; (b) 'Society and ways of life': the origins and growth of population, the ethnic and cultural heritage of the city, and the pattern of social areas within the metropolitan region; and (c) 'the contemporary urban scene': the personality of the city's landmarks, nodes, streetscapes, and districts. Fieldwork is an important part of the course.

GEOG C315 ***Cultural Geography*** (3 credits)
Prerequisite: GEOG C211, or permission of the Department. Cultural Geography is concerned with the application of the concept of culture to geographic problems. Attention is focused on the spatial *patterning* of material and non-material elements of culture (culture areas); on the *processes* of cultural, temporal, and spatial change; on the *relationships* between Man and land (cultural ecology); and especially on how these relationships are reflected in different *ensembles* of Man and land (cultural landscapes).
NOTE: Students who have received credit for GEOG C316 may not take this course for credit.

GEOG C317 ***Population Geography*** (3 credits)
Prerequisite: GEOG C200 or GEOG C211, or permission of the Department. The characteristics, dynamics, and distribution of world populations. Census data and techniques of census analysis. Rural/urban populations and their varying proportions. The vital processes of population change; natural increase and migration. Growth rates, population policies, and population pressure. Study of selected groups. The demographic prospects.

GEOG C325 ***Introduction to Historical Geography*** (3 credits)
Prerequisite: GEOG C211 or permission of the Department. This course aims to develop a geographical understanding of the past for its own sake and for its relevance to interpreting present geographical patterns of population, settlement and economic activity. The focus is on sources and techniques in historical geography. These are demonstrated through case studies of selected themes and problems.

GEOG C331 ***Urban Geography*** (6 credits)
Prerequisite: GEOG C211 or URBS C280, or permission of the Department. A study of the prehistoric town, the Greek and Roman town, towns in the Middle Ages, the trading city, the pioneer town, and the modern metropolis. The distribution of such towns, their development, growth, and internal pattern of organization will be looked at from a historical and geographical point of view. Problems of conurbations and large metropolitan cities in the present age will be discussed and evaluated. Special emphasis will be given to Canadian cities, to their site, function, organization, growth, and development, as well as to urban problems relating to zoning, transportation, urban renewal, etc.

GEOG C347 ***Geography of Canada*** (3 credits)
Prerequisite: 6 credits in Geography or permission of the Department. An overview of the bases of regional differentiation in Canada. The course will provide an analysis of Man-environment relations, cultural landscapes and spatial organization of the major regions.
NOTE: Students who have received credit for GEOG C341 may not take this course for credit.

GEOG C352 ***Geography of Recreation*** (3 credits)
Prerequisite: GEOG C211, 30 credits in the Leisure Studies Programme, or permission of the Department. The course examines the geographical aspects of recreation. The approaches followed are from the viewpoints of spatial patterns, landscape analysis and Man-environment relations. The topics studied are within the framework of (i) recreation in the countryside and (ii) recreation in the city. Specific topics include national parks, recreation land capability analysis, landscape evaluation, and city parks.
NOTE: Students who have received credit for GEOG C356 may not take this course for credit.

GEOG C353 ***Geography of Tourism*** (3 credits)
Prerequisite: GEOG C211, 30 credits in the Leisure Studies Programme, or permission of the Department. The course examines the geographical aspects of tourism. Topics studied include: the analysis of tourist flows, the role of tourism in area development, the spatial aspects of selected elements of tourism (such as transportation and marketing), examination of selected areas as tourist destinations, and geographical analysis of resort cities.
NOTE: Students who have received credit for GEOG C356 may not take this course for credit.

GEOG C357 ***Resource Analysis*** (6 credits)
Prerequisite: GEOG C211, or permission of the Department. Focus will be on the geographer's role in resource analysis. Problems of resource inventories and allocations between users, present and future, will be examined with examples drawn from land use, energy, forestry and fishing. The allocation question will include problems of perceptions and attitudes of resource users. Attention will be given to natural hazard research, and to institutional and policy models for resource management.

GEOG C358 ***Economic Geography I*** (3 credits)
Prerequisite: GEOG C211 or permission of the Department. This course will deal with the spatial organization of agricultural land use, industrial patterns and networks, with some attention given to tertiary activities and urban land use. The focus will be on the classical location theories - Von Thunen, Weber, Lösch and Christaller - and their application to behaviour in the real world, characterized by individual and corporate decision-making. Selected examples of real-world distribution will be considered.

GEOG C359 ***Economic Geography II*** (3 credits)
Prerequisite: GEOG C211; GEOG C358, or permission of the Department. The aim is to integrate the various aspects of GEOG C358 by focusing on the question of regional systems and regional development. The course will examine various models of regional structure, such as, the heartland - periphery paradigm. Consideration will also be given to models of short- and long-term diffusion innovations and economic changes in the spatial economy.

GEOG C361 ***Introduction to Geographical Research*** (3 credits)
Prerequisite: Six credits in Geography, or permission of the Department. The course will introduce students to the methods and techniques used to acquire original geographical information in the field, laboratory, and archives. The course may include a week-end field camp.

GEOG C362 ***Quantitative Geography I*** (3 credits)
Prerequisite: Twelve credits in Geography, or permission of the Department. An introductory course in the applications of descriptive and analytical statistical techniques in Geography. Lectures and laboratory. *NOTE A/See §200.7*

GEOG C366 ***Intermediate Cartography*** (3 credits)
Prerequisite: GEOG C267. The focus of this course is the detailed study of the nature of graphic variables together with their implementation, by traditional and computer methods, in black and white small scale mapping. The course includes lectures, seminars, practical assignments and relevant field trips.
NOTE: Students who have received credit for GEOG C262 may not take this course for credit.

GEOG C369 ***Field Studies in Geography*** (3 credits)
Prerequisite: GEOG C361, or permission of the Department. A field course in which a selected area is intensively studied.

GEOG C371 ***Biogeography*** (6 credits)
Prerequisite: GEOG C271, or permission of the Department. A study of the distribution of plants and animals, with emphasis on their soil and climatic inter-relations. Relevant field trips are included.

GEOG C372 ***Analysis of the Environment*** (6 credits)
Prerequisite: GEOG C271, or permission of the Department. A review of modern theories and techniques in geomorphology, hydrology, pedology, denudation, chronology, and landscape classification. The course includes a discussion of the Pleistocene Epoch in terms of applied research methods.

GEOG C373 ***Climatology*** (6 credits)
Prerequisite: GEOG C271, or permission of the Department. The broad aspects of world regional climates considered from the point of view of both physical and dynamic climatology. The course includes practical work.

GEOG C391 ***History of Geographical Thought*** (3 credits)
Prerequisite: Eighteen credits in Geography. A study of the development of the field of geography from ancient times down to the present. Representative geographical works of the Greeks, the Romans, and of the Middle Ages, the Age of Discovery, the nineteenth and twentieth centuries will be examined and discussed. The present-day concepts of the field and function of geography will receive special attention.

GEOG 398 ***Selected Topics in Geography*** (3 credits)

GEOG 399 ***Selected Topics in Geography*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable and Geography Course Guide.

GEOG C405 ***Tutorial in Man-Environment Relationships II*** (6 credits)
Prerequisite: GEOG C305. Tutorial discussion of Man's impact on the environment, emphasizing current problems and issues.

GEOG C433 ***Applied Urban Geography*** (6 credits)
Prerequisite: GEOG C331, or permission of the Department. An applied course in urban design and land use planning. An overview of current theory and practice will be balanced, during the second term, by studio planning projects emphasizing a team approach.
NOTE: Students who have received credit for GEOG C401, INTE C480 or URBS C433 may not take this course for credit.

GEOG C462 ***Advanced Cartography*** (3 credits)
Prerequisite: GEOG C366. This course exposes students to many of the issues and problems faced by the cartographer in compiling, designing and producing colour maps. A laboratory assignment of a practical nature forms an important part of the course.
NOTE: Students who obtained credits for GEOG N-466 in 1975-76 may not register for this course.

GEOG C475 ***Hydrology I*** (3 credits)
Prerequisite: GEOG C271, and one of GEOG C371, C372, or C373, or permission of the Department. Theories and practice of hydrology, with emphasis on geographical aspects and resource utilization. Includes introduction to glaciology.

GEOG C476 ***Hydrology II*** (3 credits)
Prerequisite: GEOG C475. Soil moisture experiments, textural analysis, hydrological models, and field trips.

GEOG C491 ***Honours Essay*** (6 credits)
Prerequisite: Final-year standing in Honours Geography. The course will require the student to propose and conduct a research project and to produce a substantial report under the supervision of a faculty adviser.

GEOG 498 ***Advanced Topics in Geography*** (3 credits)

GEOG 499 ***Advanced Topics in Geography*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable and Geography Course Guide.

31.140 Geology

Chairman
P.S. KUMARAPELI, *Associate Professor*

Professor
D.J. McDOUGALL

Associate Professors
H.S. deROMER
J.T. JENKINS
K.K. MUKHERJI
G.P. SASSANO

In addition to programmes in geology, the Department, in cooperation with Physics, Chemistry, Geography and Biology Departments, offers four geology-based interdisciplinary programmes. The Geology-Physics and Geology-Chemistry programmes are designed for students who wish to pursue careers in Geophysics and Geochemistry respectively, through subsequent job training or graduate studies. The programme in Resource Analysis and Land Use is designed to develop the conceptual and technical facility to enable graduating students to make objective judgements regarding the resource potential and land use of a geographical region. The programme in Geology-Ecology is designed to provide a strong foundation in geology with an orientation towards ecology as a subdiscipline of biology.

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

69 BSc Honours in Geology

Stage I

18 GEOL C210^3, C211^3, C212^3, C213^3, C216^3, C231^3
3 COMP 212^3
3 Chosen from BIOL C222^3, GEOG C362^3

Stage II

24 GEOL C311^6, C313^3, C314^3, C316^3, C318^3, C331^3, C332^3

Stage III

21 GEOL C411^6, C413^3, C414^6, C415^3, C417^3

63 BSc Specialization in Geology

Stage I

18 GEOL C210^3, C211^3, C212^3, C213^3, C216^3, C231^3
3 COMP 212^3
3 Chosen from BIOL C222^3, GEOG C362^3

Stage II

24 GEOL C311^6, C313^3, C314^3, C316^3, C318^3, C331^3, C332^3

Stage III

15 GEOL C411^6, C413^3, C415^3, C417^3

83 BSc Specialization in Geology-Physics

Stage I

30 GEOL C210^3, C211^3, C212^3, C213^3; PHYS C232^3, C243^3, C253^3, C254^3; MATH C261^6

Stages II & III

24 GEOL C216^3, C231^3, C311^6, C331^3, C332^3, C415^3, C422^3
9 Chosen from GEOL C232^3 and Geology 300- and 400-level courses
10 PHYS C291^1, C293^1, C295^2, C364^3, C434^3
10 Chosen from PHYS C244^3, C292^1, C294^1, C335^3, C336^3, C352^3, C392^1, C394^1, C465^3, C494^1, C495^1

82-83 BSc Specialization in Geology-Chemistry

Stage I

30 GEOL C210^3, C211^3, C212^3, C213^3, C216^3; CHEM C211^6, C241^3, C242^3; COMP 212^3

Stages II & III

18 GEOL C231^3, C311^6, C331^3, C332^3, C415^3
12 Chosen from GEOL C232^3, C312^3, C313^3, C390^3, C411^6, C416^3, C421^3, C423^3
17 CHEM C231^2, C233^2, C290^3, C312^3, C332^2, C338^2, C341^3
5-6 Chosen from CHEM C221^3, C222^3, C339^2, 398^3 or 498^3

78 BSc Specialization in Resource Analysis and Land Use

Stage I

27 GEOL C210^3, C211^3, C212^3, C213^3, C216^3, C231^3; GEOG C211^6, C267^3

Stages II & III

15 GEOL C311^6, C331^3, C332^3, C415^3
12 Chosen from GEOL C232^3 and Geology 300- and 400-level courses
18 GEOG C317^3, C357^6, C372^6, C475^3
6 from either POLI C361^3, C363^3
or
*ECON C391^3, C396^3

**Requires prerequisites of ECON C201^3 ECON C203^3*

78 BSc Specialization in Geology-Ecology

Stage I

24 GEOL C210^3, C211^3, C212^3, C213^3; BIOL C222^3, C230^3, C240^3, C250^3

Stages II & III

24 GEOL C216[3], C224[3], C231[3], C311[6], C331[3], C332[3], C415[3]

9 Chosen from GEOL C232[3] and Geology 300- and 400-level courses

18 BIOL C270[3], C344[3], C351[3], C353[3], C355[3], C480[3]

3 Chosen from BIOL C321[3] and C454[3]

39 BSc Major in Geology

Stage I

18 GEOL C210[3], C211[3], C212[3], C213[3], C216[3], C231[3]

Stages II & III

15 GEOL C311[6], C331[3], C332[3], C415[3]

6 Chosen from GEOL C232[3] and Geology 300- and 400-level courses

24 Minor in Geology

12 GEOL C210[3], C211[3], C212[3], C213[3]

12 GEOL elective credits

NOTE: GEOL C202[3], C203[3], C205[3], C206[3], C207[3], C208[3] cover topics of general interest in Earth Sciences and may be taken by students without a strong background in science.

Students without CEGEP Geology 901 or equivalent are required to take GEOL C210[3].

Students who already had Honours status by June 1, 1977, will continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

Field Trips and Field Schools

Field trips, normally conducted on weekends, are mandatory in some of the geology courses. In addition, two field schools (GEOL C216, GEOL C316) are conducted by the staff in the two weeks immediately following the Spring exams. Enrolment in field schools is normally restricted to students registered in programmes for which they are required courses. Other geology students with appropriate prerequisites will be accepted only if space is available in the courses.

Summer Employment

It is strongly recommended that, prior to graduation, at least one summer be spent in some phase of geological work. Although the Department of Geology cannot guarantee summer employment, its students can normally expect to work in geology with government agencies or private exploration companies during the summer months.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

GEOL C202 ***Oceanography*** (3 credits)
Geomorphology of the ocean floor, with emphasis on the significance of the mid-oceanic ridges and trench systems. The physical and chemical characteristics and circulation of ocean waters and their causes. Tides and waves. Distribution and origin of terrigenous, biogenous, chemogenic, volcanogenic, and polygenic sediments in the ocean basins. Conditions of oceanic sedimentation. Quantitative distribution of suspended sedimentary materials at the ocean bottom. Size composition of suspensions and bottom sediments. Economic resource potential of the oceans. Lectures only.
NOTE: Geology students in degree programmes may not take this course for Geology credits.

GEOL C203 ***Man and His Geological Environment*** (3 credits)
Prerequisite: None; GEOL C210 recommended. Geology in the ecosystem. The earth's atmosphere, hydrosphere, lithosphere, and biosphere in geologic time. Long-range geological effects of ecosphere pollution. Trace nutrients and health, with emphasis on the geology of trace-elements and their cause and effect on biological systems. Understanding of, control for, and prevention of natural hazards. Changes in the earth's climate. Role of Geology in land use. Lectures only.
NOTE: Students in degree programmes in Geology may not take this course for Geology credits.

GEOL C205 ***Non-Renewable Resources*** (3 credits)
Prerequisite: None; GEOL C210 recommended. Rocks and ore minerals. Present and future availability of earth resources. The nature, classification, and mode of occurrence of mineral deposits. Exploration, development, and rational exploitation of mineral resources. Elements of mining economics. Distribution of oil, gas, coal, and base-metal deposits. Evaluation of the effects of mining operations on environment. Lectures only.
NOTE: Students in degree programmes in Geology may not take this course for credit.

GEOL C206 ***Earthquakes, Drifting Continents and Volcanoes*** (3 credits)
The aim of the course is to provide an up-to-date account of our present knowledge of earthquakes and volcanoes and their global connections which will be of general interest for students with little or no previous background in earth science. Areas of concentration will be: nature, distribution and causes of earthquakes and volcanic eruptions, earthquake waves and their effects, measuring earthquakes, great earthquakes and volcanic eruptions in world history, products of volcanic eruptions, four billion years of volcanism on the Earth and elsewhere in the solar system. Prediction of earthquakes and volcanic eruptions and global connections between earthquakes, drifting continents and volcanoes. Lectures only.
NOTE: Geology students in degree programmes may not take this course for credit.

GEOL C207 ***North America and the Great Ice Age*** (3 credits)
The aim of the course is to present the major principles of geology upon which our knowledge of the ice age is based. Areas of concentration will be: the development of the glacial theory, glaciers and glaciation, tracking ancient glaciers, glacial chronology in North America, two million years of cold

spells and warm spells, earlier glaciations, causes of glacial climates, speculations for the future and the effect of glacial loads on the earth's crust. Lectures only.
NOTE: Geology students in degree programmes may not take this course for Geology credits.

GEOL C208 ***The Earth, Moon and the Planets*** (3 credits)
The course emphasizes the cosmic perspective of the Earth and focuses attention on how the results of the last two decades of planetary exploration have brought about an intellectual revolution concerning the planets, especially their surface features, processes and histories. Lectures only.
NOTE: Geology students in degree programmes may not take this course for Geology credits.

GEOL C210 ***Physical Geology*** (3 credits)
An elementary study of minerals and rocks, and of the internal and external processes which shape the earth's surface. Laboratory work deals with identification of minerals, rocks, and fossils, as well as interpretation of topographic and geologic maps. Field trips to Mount Royal, Eastern Townships, and Laurentians. Lectures and laboratory.

GEOL C211 ***Mineralogy I*** (3 credits)
Physical and chemical properties of minerals. Crystallography, crystal notation, stereographic projection. Crystal structures. Identification, description, and classification of minerals. One or two field trips near Montreal. Lectures and laboratory.

GEOL C212 ***Invertebrate Paleontology*** (3 credits)
Prerequisite: GEOL C210, or equivalent. A systematic survey of major invertebrate fossil groups, with chief emphasis on morphology, classification, and geologic occurrence. Study of principles of evolutionary concepts and zonation. Some selected discussion on paleoecology. Lectures and laboratory.

GEOL C213 ***Structural Geology I*** (3 credits)
Prerequisite: GEOL C210 or equivalent, previously or concurrently or permission of the Department. Major structural features of the Earth; principles of rock deformation; primary structures in igneous and sedimentary rocks and their significance. Classification and analysis of folds and fractures, study of secondary structures associated with folding. Laboratory deals with structural problems solved by orthographic and stereographic methods. Several field trips to selected outcrop areas, with reports. Lectures and laboratory.

GEOL C216 ***Field Methods*** (3 credits)
Prerequisite: GEOL C213; GEOL C231. Elements of surveying, construction of base maps. Geological field methods: description and recording of geological field data, construction of geological maps. Collection and presentation of field data in exploration geophysics and exploration geochemistry. One lecture per week in the Winter Session and two-week field school in the Spring, immediately after the final examinations.

GEOL C224 ***Introduction to Remote Sensing and Terrain Analysis*** (3 credits)
Prerequisite: GEOL C210 or GEOG C271. GEOL C213 recommended. An introduction to a variety of remote sensing techniques including aerial photography, airborne magneto meter surveys, aerial thermography, side-looking aerial radar and multispectral scanning imagery from satellites. Emphasis will be placed on geological and geographical applications of terrain analysis. LANDSAT imagery, airphoto, stereopairs, and aeromagnetic maps will be used in the laboratory for the analysis of a number of selected area. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C215 may not take this course for credit.

GEOL C231 ***Physics of the Earth*** (3 credits)
Prerequisite: CEGEP MATH 103; 203; CEGEP PHYS 301; GEOL C210 or equivalent. This course is directed toward the general understanding of physical phenomena of the solid earth. Subjects for consideration include the following: earth's origin, age, radioactivity, magnetism, gravity field, seismology, heat flow, structure and physical state of the earth's interior. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C221 may not take this course for credit.

GEOL C232 ***Introduction to Geochemistry*** (3 credits)
Prerequisite: CEGEP CHEM 201; CEGEP PHYS 30l; CEGEP MATH 103; CEGEP MATH 203; GEOL C210. The course will focus on the application of concepts of elementary chemistry to geological problems. Subjects for consideration include: application of thermodynamics to geological problems, phase equilibria relationships in petrogenesis, partitioning of elements, crystal chemistry, distribution of elements, chemistry of natural waters including properties of water at high temperatures and pressures. Lectures and laboratory.
NOTE: Students who have credit for GEOL C223 may not take this course for credit.

GEOL 298 ***Selected Topics in Geology*** (3 credits)

GEOL 299 ***Selected Topics in Geology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

GEOL C309 ***Economic Geology Laboratory*** (1 credit)
Prerequisite: GEOL C332 taken concurrently. Ore reserve calculations; core logging; economic feasibility studies of mineral deposits.
NOTE: Students who have received credit for GEOL C412 may not take this course for credit.

GEOL C311 ***Introductory Petrology*** (6 credits)
Prerequisite: GEOL C211. The identification and description of hand specimens of igneous, sedimentary, and metamorphic rocks. Rock associations. Classification and origin of major rock groups. Lectures and laboratory.

GEOL C312 ***Mineralogy II*** (3 credits)
Prerequisite: GEOL C211. Point and translational symmetry, point groups, space groups, interpretation of space-group tables, elements of crystal chemistry, chemistry and phase relations of important rock-forming minerals. Stereographic projections of crystal data; the Universal Stage and powder diffractometry in identifying minerals are subjects stressed in laboratories. Lectures and laboratory.

GEOL C313 ***Optical Crystallography*** (3 credits)
Prerequisite: GEOL C211. Behaviour of light in crystals. The optical indicatrix. The polarizing microscope and optical properties of minerals. Identification of non-opaque minerals in oil immersion and thin sections. If time permits, use of the Universal Stage will be introduced. Lectures and laboratory.

GEOL C314 ***Stratigraphy*** (3 credits)
Prerequisite: GEOL C212; GEOL C311, previously or concurrently. Introduction to historical developments of stratigraphic concepts. Role of natural dynamic processes in the evolution of stratigraphic record. Discussion on stratigraphic classification and nomenclature. Major classification of tectonic elements in sedimentary basins, and broad patterns in the distribution of sedimentary rocks in relation to tectonic framework. Detailed analysis of stratigraphic principles, such as correlation (lithostratigraphic, biostratigraphic, chronostratigraphic), facies (lithofacies; biofacies), unconformities, and cyclotherm. Critical evaluation of stratigraphic sequences using modern and ancient examples for the recognition of aeolian, alluvial fan, fluvial, lacustrine tidal flats, barrier coastlines, carbonate shoreline, shallow marine and submarine environments. Lectures and laboratory.

GEOL C316 ***Field Geology*** (3 credits)
Prerequisite: GEOL C216; GEOL C311, or permission of the Department. Two-week field work right after the final examination period. Working in groups, students will map an area, prepare sections, and submit a geological map and/or written report. Group studies of important outcrops or outcrop areas and quarries. Transportation is provided by the Department but students must pay for board and lodging.
NOTE: Students taking this course in their final year may not be able to graduate in the Spring of the same year.

GEOL C318 ***Structural Geology II*** (3 credits)
Prerequisite: GEOL C213. Concepts of strain and mechanics of deformation. Description of tectonic fabrics and analysis of folds; identification and interpretation of polyphase deformation. Regional structural associations and their evaluation. Laboratory will include field oriented structural problems, drill holes and regional structural analysis. Use of aerial photographs in the preparation of geological maps and sections. Several field trips and structural mapping of selected outcrops or outcrop areas. Lectures and laboratory.

GEOL C322 ***Phanerozoic Geology of Canada*** (3 credits)
Prerequisite: GEOL C311; GEOL C331, (may be taken concurrently). A study of the geology of Cordilleran, Appalachian and Arctic provinces, platforms and continental shelves of Canada with emphasis on structure, stratigraphy, tectonic evolution and resources. Reading assignments and colloquium are used to probe into specific problems. Lectures and seminars.

GEOL C323 ***Precambrian Geology of Canada*** (3 credits)
Prerequisite: GEOL C311; GEOL C331, (may be taken concurrently). A study of the geology of the Canadian Shield with emphasis on problems of correlation, tectonic style and distribution of ore deposits. Lectures and seminars.

GEOL C324 ***Analytical Methods in Geochemistry*** (6 credits)
Prerequisite: CEGEP Chemistry 201; CEGEP Physics 301; CEGEP Mathematics 103; CEGEP Mathematics 203; or equivalent courses. Chemical equilibrium as applied to volumetric and gravimetric procedures; general theory of volumetric titrations; titration curves; application of general titration theory to neutralization precipitation; complexation oxidation- reduction and nonaqueous solvent titrations; theory of potentiometry and potentiometric titrations; theory of gravimetric analysis; methods of separation by chemical and physical means; electrogravimetry and electrolytic separations; absorptimetric theory and absorptimetric methods of analysis. Analyses of major and minor components of geological material. Lectures and laboratory.
NOTE: A student who has obtained credits for CHEM C211 may not take this course for credit.

GEOL C325 ***Geostatistics and Computer Applications in Geology*** (3 credits)
Prerequisite: GEOL C210, or equivalent. Statistical analysis and computing methods applied to geological problems. Lectures and laboratory.

GEOL C331 ***Historical Geology*** (3 credits)
Prerequisite: GEOL C212; GEOL C213; or permission of the Department. Fundamental concepts in Historical Geology; principles of stratigraphy, paleogeography and geochronology. A systematic review of the geological history of the Earth, and development of life forms from the Precambrian to Recent. Geological evolution of classical areas with special attention to the North American continent. Studies of stratigraphic sections and geological maps. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C310 may not take this course for credit.

GEOL C332 ***Economic Geology*** (3 credits)
Prerequisite: GEOL C311 previously or concurrently. The course deals with the genetic concepts leading to the formation of metallic and non-metallic mineral deposits, their classification, world distribution and economic evaluation. Concepts related to zonation, metallogenic provinces, metallotects, and exploration and evaluation of mineral deposits will also be dealt with. Laboratory includes examination and study of selected ore-suites from the most importing mining camps, ore reserve calculations, core logging and economic feasibility studies of classical mineral deposits. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C317 may not take this course for credit.

GEOL C390 ***Petrology*** (3 credits)
Prerequisite: GEOL C311; GEOL C313. Microscopic study of thin sections of common igneous, metamorphic and sedimentary rocks. Selected topics in petrogenesis. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C411 may not take this course for credit.

GEOL 398 ***Selected Topics in Geology*** (3 credits)

GEOL 399 ***Selected Topics in Geology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

GEOL C411 ***Igneous and Metamorphic Petrology*** (6 credits)
Prerequisite: GEOL C311; GEOL C313. Interpretation of phase diagrams. Mineralogy, fabric, and petrogenesis of igneous and metamorphic rocks. Magmatic and metamorphic processes. ACF and AKF diagrams for various metamorphic facies. Study of selected problems. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C390 may claim only three credits for this course.

GEOL C413 ***Sedimentary Petrology*** (3 credits)
Prerequisite: GEOL C311; GEOL C313. General principles of sediment diagenesis, followed by detailed analysis of the diagenetic evolution of sandstone, shale, and carbonate rocks. Emphasis is placed heavily on the microscopic criteria in the recognition of diagenetic fabric. Problems of primary sedimentary structures and their hydro-dynamic interpretation are also discussed. Specialized topics on current development in sedimentary lithogenesis are also included. Lectures and laboratory.

GEOL C414 ***Undergraduate Research*** (6 credits)
Prerequisite: For Third-Year Honours students. Honours students in their final year are expected to show competence in isolating and examining a geological problem under the supervision of a faculty adviser. A written application to take the course, including a brief outline of the research project, must be made to the Department before April 15 of the second year. The application will be reviewed by a committee and a decision forwarded by mail. The results of research must be presented in the form of an undergraduate thesis, two copies of which must be submitted by April 1.
NOTE: Written requests from Specialization students, with appropriate academic records, to take the course will be considered.

GEOL C415 ***Plate Tectonics and Crustal Evolution*** (3 credits)
Prerequisite: GEOL C213; GEOL C231; GEOL C311. Techniques of data collection in tectonics. Structure and rheology of the upper mantle. Tectonics of crustal types to include shields, platforms, passive continental margins, Phanerozoic foldbelts, continental rifts, island-arc trench belts and oceanic rises. Sea-floor spreading, plate tectonics, magma associations and plate reconstructions. Crustal origin and growth. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C315 may not take this course for credit.

GEOL C417 ***Mineral Deposits*** (3 credits)
Prerequisite: GEOL C332; GEOL C390 or GEOL C411 previously or concurrently. The course deals with the study of ore deposits generated by magmatic segregation, contact metasomatic, hydrothermal, volcanogenic, sedimentary and supergene enrichment processes. Concepts of geothermometry, geobarometry and stable isotopes will also be dealt with. Examples of particular geological interest from the most representative mining districts of the world. Laboratory includes petrological examination of metallic suites, fluid inclusion and Vickers microhardness tests. Lectures and laboratory.
NOTE: Students who have received credit for GEOL C416 may not take this course for credit.

GEOL C421 ***Exploration Geochemistry*** (3 credits)
Prerequisite: GEOL C311, or permission of the Department. Basic principles; primary and secondary

dispersion processes and their significance in geochemical exploration; field and analytical techniques (one field excursion early in the fall term); interpretation of geochemical data; organization of exploration programmes; selected case histories. Lectures and laboratory.

GEOL C422 ***Exploration Geophysics*** (3 credits)
Prerequisite: GEOL C231, or permission of the Department. A brief study of the principles of magnetic, gravimetric, electric, and seismic methods of mineral exploration; interpretation of geophysical data; organization of exploration programmes; selected case histories. Lectures and laboratory.

GEOL C423 ***Introduction to X-ray Crystallography*** (3 credits)
Prerequisite: GEOL C312. The nature of X-rays, diffraction, the reciprocal lattice, powder diffractometer, powder cameras, single-crystal methods. Laboratory work will stress the techniques of powder diffractometry and precession photography. Lectures and laboratory.

GEOL C424 ***Engineering Geology*** (3 credits)
Prerequisite: GEOL C210; or equivalent (GEOL C213 and GEOL C224 are recommended). Engineering properties of rocks and soils. Landslides, groundwater, frost action, and permanently frozen ground. Application of geology to engineering problems—concrete petrology, tunnels, slope control, foundations, roads, airports, dams, and reservoirs. One term paper to be prepared. The laboratory period will include field trips, engineering geology, case histories, and feasibility study of engineering geology problems. Lectures and laboratory.

GEOL C425 ***Fossil Fuels*** (3 credits)
Prerequisite: GEOL C314; GEOL C415, previously or concurrently or permission of the Department. Origin and accumulation of petroleum hydrocarbons and coal. Distribution of oil, natural gas, and coal deposits as a function of geological environments. Geology of major oil and coal fields of the world. Global energy requirements and production forecasts. Lectures and laboratory.

GEOL 498 ***Advanced Topics in Geology*** (3 credits)

GEOL 499 ***Advanced Topics in Geology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.150 Health Education

Administrator
D.J. DICKS, *Vice-Dean, Curriculum*

Coordinator
J. BARCLAY

Health Education offers:
1. B.A. Specialization in Community Nursing
2. Certificate in Community Nursing

Beginning January 1, 1983, no new students will be admitted into Health Education Programmes. Courses will continue to be scheduled to meet the needs of students in the programmes.

A MINIMUM OF ONE COURSE IN A SEMESTER IS MANDATORY IN BOTH PROGRAMMES.

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

66 BA Specialization in Community Nursing
Prerequisite: R.N.
Stage I
18 NURS C205^{3}, HEAL C206^{6}, C209^{3}, C211^{3}, C215^{3}
Stage II
24 NURS C301^{3}, C307^{3}, HEAL C320^{6}, HEAL C323^{3}, NURS C324^{6}, C325^{3}
Stage III
12 NURS C415^{3}, C417^{3}, C435^{3}, C436^{3}
12 Elective credits in Nursing chosen in consultation with the programme adviser

45 Certificate in Community Nursing
Prerequisite: R.N.
45 HEAL C206^{6}, NURS C213^{3}, C301^{3}, C307^{3}, HEAL C320^{6}, C323^{3}, NURS C324^{6}, C325^{3}, C415^{3}, C417^{3}, C435^{3}, C436^{3}

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

For descriptions of Health Education and Nursing courses, please refer to §31.150 of the 1985-86 Undergraduate Calendar.

31.160 History

Acting Chairman
J.L. HILL, *Associate Professor*

Professors
A.H. ADAMSON
J.F. LAFFEY
J.C. NISH
L. ROTHKRUG
G. RUDE
R. TITTLER

Adjunct Professor of History
E.E. McCULLOUGH

Associate Professors
F.G.W. ADAMS
C.L. BERTRAND
K. BINDON
F. BODE
F.R. CHALK
M.G. DECARIE
R.J. DIUBALDO
D. GINTER
W.H. HUBBARD
F.H. KRANTZ
M. MASON
R. RUDIN
S.J. SCHEINBERG
F.E. SHLOSSER
M. SINGER
I.H. SMITH
W. VAN NUS
M. VIPOND

Research Associate Professor of Medieval History
R.T. COOLIDGE

Assistant Professor
G. CARR

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

60 BA Honours in History
The following courses in an approved sequence constitute Honours in History. Students intending to enter the Honours programme are advised to consult with the Department.
*6 HIST C201[3] and C202[3]
*6 HIST C203[3] and C205[3]
*6 From surveys in United States, Asian, African, or Latin American History
6 HIST electives at 200 level
6 HIST electives at 300 level
6 HIST electives at 400 level
6 HIST C391[6]
6 HIST C493[6]
6 History electives at 300 level, or related course(s) in another department (with approval from Department of History)
6 History electives at 400 level, or related course(s) in another department (with approval from Department of History)

60 BA Specialization in History
*6 HIST C201[3] and C202[3]
*6 HIST C203[3] and C205[3]
*12 From surveys at 200 level in United States, Asian, African, or Latin American history
24 HIST electives at any level
6 HIST electives at 400 level
6 HIST electives, or related courses in another department (with approval from Department of History)

Students will be exempted from these courses if they can show they took comparable courses in CEGEP. The student will be required to take 6 credits from History electives in their place. In the Major and Honours programmes, a student who is exempted from HIST C201 or C202, and from HIST C203, C205, is encouraged to take a course in Asian, African, or Latin American history.

60 BA Joint Specialization in History and English
6 Chosen from ENGL C256 through C284
6 ENGL C310[6], C311[3], C312[3], C328[3], C329[3], C330[6]
12 ENGL credits chosen from two different periods to parallel History courses to be chosen in consultation with the departments
6 ENGL elective credits
12 HIST credits chosen from two different historical periods to parallel English courses to be chosen in consultation with the departments
18 HIST elective credits

42 BA Major in History
*6 HIST C201[3] and C202[3]
*6 HIST C203[3] and C205[3]
*6 From surveys at 200 level in United States, Asian, African, or Latin American history
6 Electives from related disciplines (with approval of History Department)
18 HIST electives at 300 or 400 level

24 Minor in History

*6 HIST C201[3], C202[3], or C203[3] and C205[3]
6 HIST electives at any level
12 HIST electives at 300 or 400 level

**Students will be exempted from these courses if they can show they took comparable courses in CEGEP. The student will be required to take 6 credits from History eletives in their place. In the Major and Honours programmes, a student who is exempted from HIST C201 or C202, and from HIST C203, C205, is encouraged to take a course in Asian, African, or Latin American history.*

30 Minor or Certificate in the History of Quebec

This programme is designed to prepare teachers at both the Secondary and CEGEP levels to offer courses in the History of Quebec. It also provides an outline of study for those who are generally interested in the topic of Quebec History.

3 HIST C209[3]
3 HIST C210[3]
12 Chosen from HIST C307[3], C308[3], C315[6]; or from HIST C393[6], C394[6], C395[3], C396[3] as courses or tutorials with Québec content
6 Chosen from HIST C400[6] (or C411[6], or C491[6], or C492[6] when the Department determines such courses to have adequate Québec content)
6 Chosen from courses on Québec or French Canada offered by the Departments of Economics, Études Françaises, Geography, Political Science or Sociology, or related courses approved by the Department.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

HIST C200 ***The Nature and Practice of History*** (6 credits)
This course, open only to History students, will address itself to two types of concerns. Students will examine the nature of historical enquiry: its varieties, purposes, traditions, and its place in contemporary society. In addition, they will receive systematic introduction to the practical aspects of critical scholarship: the use of the library, methods of research, and forms of writing critical essays.

HIST C201 ***Introduction to European History to 1789*** (3 credits)
A survey of the history of Europe to the French Revolution, with emphasis on the development of ideas and political institutions.

HIST C202 ***Introduction to European History, from 1789 to the Present*** (3 credits)
A survey of the history of Europe from the French Revolution to the present, with emphasis on the development of ideas and political institutions.

HIST C203 ***History of Canada, Pre-Confederation*** (3 credits)
A survey of Canadian history, from settlement to Confederation, emphasizing readings and discussions on selected problems.

HIST C205 ***History of Canada, Post-Confederation*** (3 credits)
A survey of Canadian history from Confederation to the present, emphasizing readings and discussions on selected problems.

HIST C209 ***Quebec to 1867*** (3 credits)
An introductory survey of the history of Québec from its origins as a colony to the creation of modern Canada by the British North American Act of 1867. Particular emphasis will be placed on a consideration of those elements of Québec's past which best assist in the comprehension of the trends prevalent in modern Québec.

HIST C210 ***Québec since Confederation*** (3 credits)
A survey of the history of Québec from the time of Confederation until the present. While due emphasis will be placed on political developments in the Province, the purpose of the course is to acquaint the student with the significant economic and social trends in modern Québec.

HIST C215 ***History of Recreation and Leisure in Canada*** (3 credits)
A survey of the history of recreation and leisure from the time of European contact with native peoples to the present day. It is placed in the context of Canadian history to examine such phenomena as European and American influences on Canada, effects of urbanization, the roles of women in society, and the commercialization of leisure. Recreation and leisure are understood to include not only sports and games but such activities as rural bees, education, drinking, gambling, and celebrations. The course will also provide an introduction to the historical literature on recreation and leisure, and to the discipline of History.

HIST C219 ***(Also given as CLAS C230) The Ancient Near East I*** (3 credits)
A survey of the political, social, economic, and intellectual history of the Ancient Near East, from the

Neolithic age to the Indo-European invasions of the early 2nd Millennium, with special emphasis placed upon the problem of the emergence of civilization in Mesopotamia, Egypt, and the Indus valley. Ancient sources utilized wherever possible.

HIST C221 ***(Also given as CLAS C231) The Ancient Near East II*** (3 credits)
A survey of the political, social, economic, and intellectual history of the Ancient Near East, from the Indo-European invasion of the early 2nd Millennium to the establishment of the Persian Empire, with special emphasis placed upon the process of diffusion of civilization throughout the Near Eastern World, the creation of Egyptian, Mesopotamian, and Persian imperialism, and the development of Hebrew monotheism. Ancient sources utilized wherever possible.

HIST C223 ***(Also given as CLAS C240) Greek History I*** (3 credits)
A political, social, economic, and cultural history of Greece from Minoan - Mycenaean times to the end of Classical Greek civilization in the fourth century B.C., with special emphasis placed upon fifth-century Athens.

HIST C224 ***(Also given as CLAS C241) Greek History II*** (3 credits)
A political, social, economic, and cultural history of the Greek World from Alexander the Great to the Roman conquest of Greece in 146 B.C. While due attention will be paid to developments within the Hellenistic kingdoms and to the later Greek achievements in art, literature, science, philosophy, and religion, the process of fusion of Hellenism with the orient—vital for the evolution of Judaism, Christianity, and Islam—will be extensively explored.

HIST C225 ***(Also given as CLAS C242) History of Rome*** (3 credits)
A study of the various aspects of the history of Rome from the city's origins to the establishment of the Roman Empire under the Emperor Augustus. The main theme of this course is the growth of the city of Rome from an early settlement on the Tiber River to mistress of the Mediterranean world. The ideologies and institutions of Republican Rome will be analyzed in detail, and a study will be made of the transitionary period that later on came to form the basis of the Roman Empire. The timespan with which this course is concerning itself is from 753 B.C. to 27 B.C.

HIST C226 ***(Also given as CLAS C243) History of the Roman Empire*** (3 credits)
A political, economic, cultural, and social history of the Roman Empire from the reign of Augustus to Constantine I the Great(27 B.C.—A.D. 337). Attention is given to both the civil and military administrations of the Roman Empire. The course will explore the transitions, first from Republic to Empire and then to the Christian Empire. Particular attention is given to the fundamental changes in society; to the continuity of Roman law and administrative structures in the Later Roman Empire based no longer on Rome but on the newly founded capital of Constantinople.
NOTE: Students who have credit for HIST C320 (CLAS C343) may not take this course for credit.

HIST C251 ***History of the United States to 1877*** (3 credits)
Survey of American history from settlement to 1877. The course will deal with the political and economic framework of American history, and with social and cultural trends.

HIST C253 ***History of the United States since 1877*** (3 credits)
Survey of American history from 1877 to the present. The course will deal with the political and economic framework of American history, and with social and cultural trends.

HIST C261 ***History of India*** (3 credits)
An introduction to the intellectual traditions, social structures, and political institutions of South Asia, with particular attention to developments during the past two centuries.

HIST C262 ***History of China*** (3 credits)
A survey of China's history from earliest times to the modern era.

HIST C263 ***History of Japan*** (3 credits)
A survey of Japan's history from earliest times to the modern era.

HIST C276 ***History of Latin America: The Colonial Period*** (3 credits)
A survey of Latin America up to the wars of independence from Spain. The main themes examined will be: precolombian cultures; the Spanish conquest; patterns of colonial trade and economy; the role of the church; the Bourbon reforms.

HIST C277 ***History of Latin America: The Modern Period*** (3 credits)
A survey of Latin American society in the nineteenth and twentieth centuries. The principal topics covered are: the social and economic roots of political instability; Mexico under Diaz; the Mexican revolution; Argentina and Brazil under Peron and Vargas; U.S. Latin American relations; Castro's Cuba; revolution and counter-revolution in contemporary Latin America.

HIST C278 ***Africa from the Nineteenth Century to the Twentieth Century*** (3 credits)
The central focus of this course will be the European assault on Africa and the unfolding of colonial economy and society. Some emphasis will be placed on resistance to colonialism and the origins of nationalism.
NOTE: Students who have received credit for HIST C270 and C272 or C271 may not take this course for credit.

HIST C279 ***Africa in the Twentieth Century*** (3 credits)
This course will deal with questions of nationalism and of the economic and social development of colonial and post-colonial Africa. There will be particular focus on liberation and revolutionary movements.
NOTE: Students who have received credit for HIST C270 and C272 or C271 may not take this course for credit.

HIST C280 ***Historical Perspectives on Contemporary Issues*** (6 credits)
A thematic and comparative historical approach to contemporary issues. The course will cross national boundaries to consider major current problems from a variety of historical perspectives.

HIST 298 ***Selected Topics in History*** (3 credits)

HIST 299 ***Selected Topics in History*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

HIST C300 ***British North America to 1848*** (3 credits)
An advanced study of the early period of colonial establishment and growth in British North America. Beginning with themes of exploration and settlement, the course will examine the social, economic and political events of the post-Conquest period that contributed to the creation of distinct regional traditions in British North America.

HIST C301 ***British North America and Canada, 1848-1896*** (3 credits)
An advanced study in which Confederation is the focus for an examination of regional colonial traditions in British North America and the growth of provincial societies in Canada. The process of Confederation involved negotiations that highlighted the social, economic and political distinctions of the participants. Similarly, the extension, application and interpretation of Canadian federalism in the period 1867-1896 engendered debate on an equally broad number of provincial themes.

HIST C302 ***Approaches to Canadian History*** (6 credits)
In this course, students will examine the many types of sources for Canadian History, including photographs, songs, and advertisements, as well as more commonly used sources such as newspaper reports, diaries, and parliamentary records. Students will be encouraged to carry out research and writing in areas of personal interest, using original sources.

HIST C304 ***Protest Movements in Canada since Confederation*** (6 credits)
An examination of the social and intellectual origins of political protest in Canada since 1867. Topics will include agrarian revolt, labour organization, and sectional discontent, with emphasis on such third parties as Canada First, Progressive Party, C.C.F., Social Credit, Union Nationale, and Parti Québécois.

HIST C307 ***History of Montreal*** (3 credits)
A study of the origins of the city, its role in the Empire of the St. Lawrence, and its rise to metropolitan dominance in Canada. Special emphasis on economic development and on ethnic groupings.

HIST C308 ***History of English-Speaking Quebec*** (3 credits)
An analysis of the experience of the different groups which have made up this community, from the Conquest to the present.

HIST C309 ***History of the Canadian North*** (3 credits)
An intensive study of the advance of the northern frontier of Canada, with emphasis on the period 1840-1945. The course will stress exploration, problems of sovereignty, conflict of cultures, and economic development.

HIST C312 ***Canada in the Twentieth Century*** (6 credits)
An intensive study of the political, economic, social, and cultural development of modern Canada.

HIST C315 ***Quebec: 1867 to the Present*** (6 credits)
An intensive study of Quebec since Confederation. While due attention will be paid to the political history of Quebec, the purpose of the course is to provide a study of the social, economic, and cultural institutions of Quebec.

HIST C316 ***Canadian Business History*** (3 credits)
This course will look at the forces influencing the history of Canadian business from the French régime to the present. The nature of business organization, the sources of capital and the relationship between government and business are among the factors to be considered.

HIST C317 ***Canada Views the United States*** (3 credits)
An examination of Canadian attitudes to the United States from 1776 to the present, with respect to both specific incidents and general trends. Emphasis will be placed on the discussion of primary source material.

HIST C319 ***A Literary History of Twentieth-Century Canada*** (3 credits)
An examination of some of the major themes of Canadian history in the twentieth century as seen by

Canadian novelists, English and French. Themes studied will include the struggle for survival; regional, ethnic, and religious plurality; and the response to urbanization and industrialization.

HIST C320 ***United States, 1890-1932: The Rise of Modern American Society*** (3 credits)
This course offers an intensive examination of American history in this period beginning with the decline of the farmers' movement and ending with the arrival of the economic crisis of the 1930's. Industrialization, the development of the corporation, trade unionism, immigration, and racial conflict are some of the major themes discussed.
NOTE: Students who have received credit for HIST C354 may not take this course for credit.

HIST C321 ***Contemporary America, 1932 to the Present*** (3 credits)
The immediate historical background of today's America is the subject matter of this course. Major themes will include: feminism, civil rights, and the rise and fall of the New Deal political coalition.
NOTE: Students who have received credit for HIST C354 may not take this course for credit.

HIST C322 ***History of Medieval Europe*** (6 credits)
A study of European society from the fall of Rome to the end of the fourteenth century. The Medieval era will be examined in terms of its typical institutions: the Holy Roman Empire; the Papacy; Feudalism; guilds and towns. Developments and changes leading to the formation of modern society will be analyzed.

HIST C324 ***(Also given as CLAS C345) History of Byzantium, 602-1453*** (6 credits)
A survey of the transformation from Late Roman Empire into the Byzantine commonwealth, and changes in economic and social conditions. Special attention is given to the reorganization of administrative and military structures, the relationship between Byzantium and its Balkan neighbours, the Arab conquest, and the rising importance of Asia Minor.

HIST C325 ***The Renaissance Era*** (3 credits)
This course explores the transition from later Medieval to Renaissance Europe. Special attention will be given to the nature, development and influence of the Italian Renaissance. Attention will also be given to social and political issues in early modern Europe.

HIST C326 ***The Reformation and Counter-Reformation in Early Modern Europe*** (3 credits)
An examination of the European Reformation and Counter-Reformation. Beginning with the late medieval context, the course will stress the significance of the period for the development of Western thought and society.

HIST C328 ***Social and Intellectual History of Early Modern Europe*** (6 credits)
A study of change and continuity in European society and culture, 1300-1650. Problems studied include feudal-capitalist relationships, the Italian Renaissance, Northern State Development, Protestant Reformation, Scientific Revolution, and European Colonial expansion. Methodological issues will be emphasized.

HIST C329 ***Women in Western History, I*** (3 credits)
A survey of the position and roles of women in Western history from antiquity to the French Revolution. Themes analyzed in the lectures and in discussions will include: Women's position in early law; the concept of courtly love; women in the French Revolution; the working woman in pre-industrial Europe.

HIST C331 ***Women in Western History, II*** (3 credits)
A survey as above but covering the period from after the French Revolution to modern times. Themes analyzed in the lecture and in discussions will include: Women in post-industrial Europe; the Suffrage Movement; the Feminist Movement in Europe and North America; women during the two World Wars; women in the modern work-force.

HIST C332 ***A Social History of Costumes and Interiors I*** (3 credits)
A social history of European civilization as reflected by fashions in dress and interiors. Dress especially mirrors accurately a society's ideals in esthetics and morals; interiors indicate lifestyles and social habits. Both costumes and interiors are treated in this course as an illustration of social history underscoring social change as from era to era. The course will cover a time-span from the Middle Ages to the Renaissance, including a brief introduction to the classical period.

HIST C333 ***A Social History of Costumes and Interiors II*** (3 credits)
Based on the same principles as HIST C332, this course will cover a time-span from the Reformation to the Victorian Age.

HIST C334 ***Social and Intellectual History of Modern Europe*** (6 credits)
The intellectual systems arising in Europe since the seventeenth century will be explored in the context of the economic and social circumstances which engendered them. This course will begin with the rise of theories of "possessive individualism", and will end with the contemporary cultural crisis. While attention will be paid to the general dynamics of culture, special attention will be devoted to the social functions of particular ideologies.

HIST C337 ***Europe and the Industrial Revolution: The Origins of Modern Society*** (3 credits)
An examination of change and stability in the social and economic structure of Europe during the first age of industrialization, c. 1760 to c. 1900.

HIST C338 ***European Society and Economy in the Twentieth Century: The Crisis of Capitalism*** (3 credits)
An examination of stability and change in the social and economic structure of Europe in the contemporary age.

HIST C339 ***Nineteenth-Century Civilization seen through the Novel*** (3 credits)
An examination of the major currents in nineteenth-century European history as seen in the novels of such writers as Dickens, Balzac, Stendhal, Dostoevsky, Flaubert, and Zola.

HIST C340 ***Twentieth-Century Civilization seen through the Novel*** (3 credits)
A study of the main themes in contemporary history as expressed in the novels of such writers as Remarque, Malraux, Hamsun, Solzhenitsyn, Pasternak, Camus, and Mailer.

HIST C341 ***History of European Diplomacy, 1870 to the Present*** (6 credits)
An intensive study of the relations among the Great Powers of Europe, from the Franco-Prussian War to the present.

HIST C342 ***History of Britain since 1460*** (6 credits)
A survey of the political, economic, and social development of modern England. Emphasis is placed on the evolution of parliamentary government in the early period, on the economic changes of the eighteenth and nineteenth centuries, and on the modern growth of democracy and the social-service state.

HIST C343 ***Social and Economic History of Britain, 1500-1900*** (6 credits)
A study of the transition from a feudal to a modern industrial society. Attention will be given to the leading features of industrial, agricultural, commercial, and financial change and their impact on the structure of society.

HIST C345 ***(Also given as GERM C345) Germany and Austria in Modern Times*** (6 credits)
Socio-economic change and the development of nation-states in German Central Europe from the eighteenth century to the present. For advance reading, the student might consult H. Holborn, *A History of Modern Germany*.

HIST C348 ***History of Ireland*** (3 credits)
A survey course that traces the history of Ireland from 432 A.D. to the present. Emphasis will be on the nineteenth and twentieth centuries. Special attention will be given to the development of Irish nationalism and relations with Great Britain. Irish music and literature will be used to supplement the historical perspective.

HIST C349 ***History of World War II*** (3 credits)
This course examines the impact of World War II in the social, economic, political and military spheres. Description of international diplomacy and major battles will be linked to a study of the social effects of the War, such as resistance movements and technological innovation.

HIST C350 ***America in the Seventeenth Century*** (3 credits)
This course examines the founding of the thirteen American colonies, with emphasis on Chesapeake society and New England puritanism.

HIST C351 ***America in the Eighteenth Century*** (3 credits)
This course examines the rise of sense of nationhood, the War for Independence, and the adoption of the U.S. Constitution.

HIST C352 ***Early National History of the United States*** (3 credits)
This course examines the political, social, and economic history of the new nation, the rise and fall of the federalist party, and the triumph of Jeffersonian democracy.

HIST C355 ***The United States in the Nineteenth Century: 1815-1850*** (3 credits)
A study of American political, social, and economic life from the end of the War of 1812 to the intensification of sectionalism about 1850. Topics include geographic expansion and the beginnings of industrialization, the characteristics of southern slave society, and the rise of a system of political parties during the age of Jackson.

HIST C356 ***The United States in the Nineteenth Century: The Era of the Civil War*** (3 credits)
A study of American political, social, and economic life before and after the Civil War, from about 1850 to 1890. Topics include sectionalism and the breakdown of parties during the 1850s, the tasks of Reconstruction after the war, the New South, and the problems of a maturing industrial society.

HIST C357 ***Foreign Relations of the United States to 1917*** (3 credits)
An analysis of United States foreign policy from the American Revolution to United States entry into World War I, emphasizing the domestic debate over foreign policy and economic development, commercial and territorial expansion, and the dynamics of Canadian-American relations.

HIST C358 ***Foreign Relations of the United States, 1917 to the Present*** (3 credits)
An historical investigation of United States foreign policy from American intervention in the Russian Revolution to the present, emphasizing United States responses to the challenge of revolutions in

Asia and Africa. American conceptions of a new world order, the rise of the multinational corporation and its impact on Canadian-American relations.

HIST C359 ***Social and Economic History of the United States*** (6 credits)
A survey of the relationship between economic and social change in the United States from the colonial period to the mid-twentieth century. Particular attention will be given to the transition from an agricultural and mercantile society in the early nineteenth century to an urban-industrial society in the early twentieth-century.

HIST C360 ***The West Indies in the Nineteenth and Twentieth Centuries*** (3 credits)
This course will survey the period which begins with the revolution in San Domingo (Haiti), and is capped by the Cuban Revolution. It will examine the social and economic consequences of the destruction of the slave system, colonialism after emancipation and the paradoxes of independence, emphasizing particularly the effects of foreign domination by both the former colonial powers (Britain, Spain and France) and by the new super powers. West Indian ideological responses such as Garveyism and Rastafarianism as well as the question of the West Indian diaspora will be discussed.

HIST C362 ***Traditional China*** (6 credits)
An examination of Chinese history from the beginning to the Ch'ing dynasty (c. 1800). Emphasis will be placed on China's political, intellectual, and cultural heritage.

HIST C364 ***Imperialism and Nationalism: India*** (3 credits)
British conquest established nearly two centuries of colonial rule over the world's oldest civilization. This course examines the nature of imperial control, the resistance of traditional leaders, European intellectual imperialism, Indian cultural and religious revivalism and modern nationalism. Special attention will be paid to M.K. Gandhi and Gandhism as well as to Muslim separatism and the Pakistan movement.

HIST C365 ***Capitalism and Communism in South Asia*** (3 credits)
British India was a vital part of a great commercial and industrial empire at the highest stage of capitalism. This course explores the economic and social impact of this period on Indian society up to the present. Imperial capitalism, the Indian entrepreneurial elites, peasants and famine, industrialization, the effects of two world wars, and the communist challenge since independence are investigated.

HIST C366 ***Nineteenth Century China*** (3 credits)
An intensive study of Chinese history between 1800 and the beginnings of the Chinese revolution with emphasis on problems in political, social and intellectual history.

HIST C367 ***Twentieth Century China*** (3 credits)
An intensive study of Chinese history since 1900 with emphasis on problems in political, social and intellectual history.

HIST C368 ***(also given as SOCI C368) The History and Sociology of Genocide*** (6 credits)
Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to it.

HIST C369 ***The English Urban Community, from Feudalism to Industrialism, 1300-1750*** (3 credits)
Topics include: the elements of urban geography; emergence of the town from the countryside; the late Medieval urban crisis; the impact of the Reformation on English towns; urban demographic patterns; commercial and industrial structures; new towns; civic planning and building; social control in the urban community; the emergence of an urban cultural identity. Familiarity with English History, English Literature, Pre-Industrial European History or Urban History will be helpful but not essential.

HIST C370 ***The English Urban Community; The Age of Industrialization, 1750-1900*** (3 credits)
Topics include: industrialization and urban population; the manufacturing town and the marketing town; urban social structure and social change; mass transport; suburbanization; central and local government; housing and health; new towns and urban-planning; the urban environment.

HIST C372 ***Revolutions in Central America: Mexico, Cuba, Nicaragua and El Salvador in the Twentieth Century*** (3 credits)
The extensive literature on the origins and outcomes of the revolutions in Central America will be studied with a view to determining the specific qualities of revolutions in these countries and their similarities with the classical revolutions in France, Russia and China. This will lead to a general discussion regarding the possibility of non-dependent social and economic development and the particular influence in the region of the United States and the Soviet Union.

HIST C373 ***Africa and the Caribbean*** (3 credits)
The origins and development of West Indian settlement, the slave trade, and the plantation system will be studied with a view to understanding simultaneously the exceptional social and economic structures which have defined West Indian history, the role of these structures in the development of European mercantilism and the effects of mercantilism on Africa. This course will cover the period from the European discovery of the new world in the late fifteenth century to the abolition of slavery in

the mid-nineteenth century and will be complemented by HIST C360, The West Indies in the Nineteenth and Twentieth Centuries.

HIST C375 ***France, 1661-1715: The Age of Louis XIV*** (3 credits)
This course will deal with the political, economic, social, and cultural developments during the period of personal monarchy of Louis XIV.

HIST C376 ***France, 1715-1789: From Regency to Revolution*** (3 credits)
This course will examine the political, economic, social, and cultural developments in eighteenth-century France. Special attention will be given to the French Enlightenment and to the tensions leading to the Revolution.

HIST C377 ***History of Russia*** (3 credits)
This course traces the origins of the medieval Russian state from the ninth century to the emergence of the Russian Empire. Emphasis is placed on political, social and economic problems of the eighteenth and nineteenth centuries. Particular attention is devoted to the Revolutions of 1905 and 1917.

HIST C378 ***History of the Soviet Union*** (3 credits)
This course examines the ideological roots of the Bolshevik Revolution, and traces the main economic, social and political developments of the Soviet Union. In addition, an analysis of Soviet foreign policy is presented from 1917 to the present.

HIST C379 ***Urban Planning in Historical Perspective*** (3 credits)
This lecture-and-discussion course assesses the development of Canadian cities in general and of Montreal in particular, with special stress on the implications for planning. Topics include the relative importance of geographic site and entrepreneurship in the rise of cities, the metropolitan dominance of, and rivalry between, Montreal and Toronto, the history of the early town planning movement in Canada with discussion of its British roots, the conflict among competing language and cultural groups in Montreal, and the aesthetic and cultural costs of post-war urban redevelopment.
NOTE: Students who have credit for INTE C380, URBS C380 or HIST C380 may not take this course for credit.

HIST C381 ***The Age of Absolutism 1640-1715*** (3 credits)
An examination of major developments in European society from the crisis of the mid-seventeenth century to the end of the War of the Spanish Succession; the emergence of the modern state and of the European state system will be emphasized.

HIST C382 ***The Age of Enlightenment 1715-1789*** (3 credits)
An examination of major developments in European society from the death of Louis XIV to the French Revolution. Special attention will be given to social and intellectual movements, more particularly to the rise of the bourgeoisie and to the key ideas of the Enlightenment.

HIST C383 ***The Age of Revolution 1789-1848*** (3 credits)
A study of the dual revolution—industrial and political—in England and France, and its initial consequences throughout Europe.

HIST C384 ***Industrialization and Nationalism 1848-1914*** (3 credits)
A study of the transformation of European society, economy, and politics in the years between the upheavals of the mid-nineteenth century and the collapse of the traditional order in World War I.

HIST C385 ***The Age of the Dictators: Europe 1914-1945*** (3 credits)
A study of the internal development and external relations of the nations of Europe from the Great War to the end of World War II. The course will examine this chaotic age primarily through an investigation of the revolutionary and reactionary upheavals that kept Europe socially, politically and economically unbalanced for thirty years.

HIST C386 ***Contemporary Europe: 1945 to the Present*** (3 credits)
A study of the internal development and external relations of the nations of Europe from the collapse of Nazi Germany to the present. The course will concentrate on the divisions between East and West, the economic recovery of Europe and the effects of the energy crisis on social, economic and political life throughout Europe.

HIST C388 ***History of Modern Italy: 1848 to 1922*** (3 credits)
A survey of the crucial developments in Italian history from the Risorgimento to the rise of fascism. The course will emphasize the problems surrounding the creation of a united Italy. Specifically, the course will examine the issues raised by nationalism, liberalism, Catholicism and industrialization.

HIST C389 ***History of Modern Italy: 1922 to the Present*** (3 credits)
A survey of the crucial developments in Italian history from Mussolini's seizure of power to the present. The course will examine the role and legacy of fascism, the creation of the republic, the economic miracle, the political and social turmoil and the rise of terrorism.

HIST C390 ***France 1789-1871*** (3 credits)
A review of the central developments in French history from the Revolution to the Paris commune. Special attention will be given to social and intellectual history. Novels such as Stendhal's *The Red*

and the Black and Flaubert's *Sentimental Education* will be used as background reading.
NOTE: Students who have received credits for HIST C344 may not take this course for credit.

HIST C391 ***Introduction to the Research Essay*** (6 credits)
Prerequisite: Enrolment in the BA Honours programme in History. The student will begin to work with an individual faculty member on a specific topic. The necessary secondary reading will be completed and primary research will begin towards the project which will be completed in HIST C493.

HIST C392 ***France 1871 to the Present*** (3 credits)
A review of French history from the Paris commune to the Fifth Republic. Special attention will be given to social and intellectual history. Novels such as Zola's *Germinal* and Camus's *The Plague* will be used as background reading
NOTE: Students who have received credits for HIST C344 may not take this course for credit.

HIST 398 ***Selected Topics in History*** (3 credits)

HIST 399 ***Selected Topics in History*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable. .

HIST C400 ***Problems in Quebec History*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in the history of Quebec. The specific content will vary from year to year.

HIST C411 ***Advanced Study in Canadian History*** (6 credits)
Prerequisite: HIST C203; HIST C205, and one 300-level course. Seminar in a selected topic in the history of Canada. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor. Topics may be selected from subjects as "Canadian Intellectual History", "The City in Canadian History", "Canada in the 1920's and 1930's", and "Canadian Social History".

HIST C412 ***Advanced Study in Canadian History*** (6 credits)
Prerequisite: HIST C203; HIST C205, and one 300-level course. A student repeating HIST C411 registers for credit under HIST C412, provided the subject matter is different.

HIST C426 ***Advanced Study in Late Classical and Medieval Europe*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in the history of late classical and medieval Europe. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor.

HIST C430 ***Advanced Study in Early Modern Europe*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in the history of early modern Europe. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor. Topics may be selected from such subjects as "Cultural Differentiation in Early Modern France and Germany" and "The Enlightenment".

HIST C436 ***Advanced Study in Modern Europe*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in the history of modern Europe. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor. Topics may be selected from such subjects as "Popular Protest in Nineteenth-Century Europe," "Revolutionary Tradition in Nineteenth-Century France," "Fascism," "Background of World War I," and "Nationalism and Industrialization in Central Europe."

HIST C438 ***Advanced Study in British History*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in the history of Great Britain. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor. Topics may be selected from such subjects as "Tudor England," "Stuart England," and "Structural Change in the English Countryside, 1500-1900."

HIST C441 ***Advanced Study in Russian and Soviet History*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. This course deals with specific problems in Tsarist and Soviet Russia. In the Pre-Revolutionary period, attention is focused on the emancipation of the peasantry, industrialization, and the growth of the opposition parties. In the Soviet period, emphasis is placed on

the problems of economic growth, the changing pattern of Soviet Marxism, and the nature of Soviet foreign policy.

HIST C451 ***Advanced Study in American History*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in the history of the United States. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor.

HIST C461 ***Advanced Study in Asian History*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in Asian history. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor.

HIST C470 ***Advanced Study in African History*** (6 credits)
Prerequisite: A survey course in the field and a 300-level course in History (minimum 3 credits) or permission of the Department. Seminar in a selected topic in the history of Africa. The emphasis will be on encouraging students to conduct historical investigation on their own, under a professor's guidance. The specific content will vary from year to year.

HIST C476 ***Imperialism and Revolution in the Third World*** (6 credits)
Prerequisite: Asian and African survey courses. A comparison of the techniques and effects of imperialism in Asia, Africa, and Latin America during the late nineteenth and twentieth centuries. Modern independence and revolutionary movements in these areas will be examined from a comparative perspective.

HIST C490 ***Joint History-English Tutorial*** (6 credits)
A tutorial conceived as an interdisciplinary effort between the Department of History and the Department of English, and designed specifically to satisfy a requirement for the History-English joint Honours programme. Tutorials may be arranged with members of the respective departments.

HIST C493 ***Honours Essay Tutorial*** (6 credits)
Prerequisite: HIST C391 previously or concurrently. This course is open only to Honours students in history. The student will work with an individual faculty member in a particular area of history. The student will be asked to produce a sustained piece of written work to be read by his/her adviser and at least one other member of the Department.

HIST C494 ***Advanced Study in the History of Science*** (6 credits)
Prerequisite: Permission of the Department. Seminar in a selected topic in the History of Science. The emphasis will be on encouraging students to conduct historical investigations on their own, under a professor's guidance. The specific content will vary from year to year depending on the instructor.

HIST C495 ***Advanced Study in the History of Science*** (6 credits)
Prerequisite: Permission of the Department. A student repeating HIST C494 registers for credit under HIST C495, provided the subject matter is different.

HIST C496 ***Joint History - French Tutorial*** (6 credits)
Prerequisite: Permission of the Department. A Tutorial conceived as an interdisciplinary effort between the Department of History and the Department of French and designed specifically to satisfy a requirement for the History - French joint Honours programme. Tutorials may be arranged with members of the respective departments.

HIST 498 ***Advanced Topics in History*** (3 credits)

HIST 499 ***Advanced Topics in History*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.170 Interdisciplinary Studies

INDIVIDUAL STUDIES PROGRAMME

Under the direction of M. Santateresa, Academic Adviser, Faculty of Arts and Science *(SGW Campus)*

Individually Structured Programmes (Specialization or Honours)

Admission

Opportunities are available in some departments and programmes to follow an Individually Structured Specialization or Honours Programme. Students must apply to the department that seems most relevant to the central aspect of their proposed programme. Students in general must have demonstrated in their previous academic endeavours that they are capable of good (B level) achievement, but in exceptional cases a student may be admitted provisionally on the recommendation of the department undergraduate coordinator.

Formal entry to the ISP may occur only after completion of preparatory courses such as are required in Matury Entry and ECP programmes. Students wishing to follow an Honours programme must follow the Faculty procedures and regulations concerning admission to Honours programmes.

Academic Regulations

The programme will consist of not less than 60 credits. The courses chosen must be based on a departmental or programme core, usually the major, but not less than 24 credits. Students will thus be required to complete necessary prerequisites, and general preparation courses such as Research Methods or Statistics, so that they could later follow a regular departmental programme if they so desire.

A Specialization student must maintain* an average of C+ in all Specialization courses; the minimum acceptable grade in any single Specialization course is C-.

**for purposes of continuation in the programme from year to year as well as for graduation.*

The programme of study must be worked out at the time of student registration into the programme. Admission to the programme must be finalized before a student registers for the final 60 credits of the 90-credit protion of their degree. To allow for the non-availability of certain courses during certain sessions, allowable substitute courses must be listed in advance. Such substitution provisions will be necessary only in the case of specialized courses that are known not to be available on a session by session basis. The intention of this regulation is to assure that the programme does not become an *ad hoc* mixture of courses without clearly rationalized academic coherence.

Students must prepare a careful, not necessarily long, statement of their goals indicating the specific reasons for their programme choice. The rationale and the sequence of courses chosen must be approved by the departmental programme coordinator and the Assistant Dean for Student Academic Affairs.

INTERDISCIPLINARY STUDIES COURSES

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

HUMANITIES 110 ***General Course in Humanities*** (6 credits)
It is the purpose of this course to enlarge and enrich the student's comprehension of his cultural heritage by the study of man as a unique creative being. The sources for this study of man are drawn primarily from the fields of history, philosophy, religion, literature and the arts with a view toward examining those experiences and ideas of enduring power which have shaped the nature of modern man from the age of Greece to the present century. (6 credits, which may not be applied to the degree programme of students admitted to the University on the basis of the D.E.C. or formal academic equivalent).

SOCIAL SCIENCE 110 ***General Course in the Social Sciences*** (6 credits)
This course has a dual purpose: to introduce the student to some of the basic concepts and subject matter of the various social sciences and to demonstrate their interrelation; and to provide the student with some knowledge of contemporary society and the social problems which confront it. (6 credits, which may not be applied to the degree programme of students admitted to the University on the basis of the D.E.C. or formal academic equivalent).

INTE C200 ***Introduction to the Methods of the Humanities and Social Sciences*** (6 credits)
This course will introduce students to representative methods used in the humanities and social sciences. Methodologies suitable to each discipline will be shown through examples and projects centered upon themes with Canadian content where possible. Instruction will be shared by the professors from the disciplines concerned.

INTE C201 ***Aesthetics: An Interdisciplinary Approach*** (6 credits)
This course attempts to bring together a number of areas central to the cultural climate of our time, with emphasis on aesthetics, and man's encounter with the creative arts. The course examines the relation of aesthetics, generally, (and art in particular) to the crisis in values, and to contemporary identity crisis. More specifically, artistic questions such as the meanings and functions of style, taste, and criticism; the questions of form and content, subjectivity and objectivity in art; and the comparison of different artistic media are integrated into the broader issues noted above. The course's format is lecture and discussion, with the use of slides, recordings, and films as illustrative material.

INTE C230 ***Philosophy and Literature I: The Ancient World*** (3 credits)
The interaction of philosophy and imaginative literature in the ancient world, from the origins of civilization in Mesopotamia through some of the major texts of Ancient Greece and Rome. Reading and discussion of literature with a high thematic content and philosophy with important literary connections: for example, selections from *Gilgamesh, The Iliad,* and the works of Aeschylus, Sophocles, Euripides, Plato, Aristotle, Lucretius, and Virgil. There will be special emphasis on the following topics: epic, fate and free will, and justics in the individual and the community.
NOTE: Students who have received credit for INTE C300 or L391 may not take this course for credit.

INTE C231 ***Philosophy and Literature II: The Middle Ages and the Renaissance*** (3 credits)
The interaction of philosophy and imaginative literature in the Middle Ages and the Renaissance, from late Rome to 1605. Reading and discussion of literature with a high thematic content and philosophy with important literary connections: for example, selections from *The Romance of the Rose,* and the works of Apuleius, Augustine, Dante, Thomas Aquinas, Machiavelli, Marlowe and Shakespeare. There will be special emphasis on the following topics: romance, faith, reason, and will.
NOTE: Students who have received credit for INTE C302 or L393 may not take this course for credit.

INTE C232 ***Philosophy and Literature III: The Modern World (1605-1832)*** (3 credits)
The interaction of philosophy and imaginative literature in the Western World in the seventeenth, eighteenth, and early nineteenth centuries. Reading and discussion of literature with a high thematic content and philosophy with close literary connections: for example, from the works of such authors as Bacon, Pascal, Newton, Milton, Locke, Berkeley, Pope, Rousseau, Hume, Goethe, Kant, Blake and Shelley. There will be special emphasis on the following topics: the development of natural science, the problem of perception, classicism and romanticism.
NOTE: Students who have received credit for INTE C300 or L391 may not take this course for credit.

INTE C233 ***Philosophy and Literature IV: The Modern World (1832-The Present)*** (3 credits)
The interaction of philosophy and imaginative literature in the Western World in the nineteenth and twentieth centuries. Reading and discussion of literature with a high thematic content and philosophy with close literary connections: for example, from the works of such authors as Mill, Darwin, Dostoevsky, Shaw, Freud, Sartre, and Kafka. There will be special emphasis on the following topics: the theory of evolution, the emergence of modern psychology, and existentialism.
NOTE: Students who have received credit for INTE C302 or L393 may not take this course for credit.

INTE 298 ***Selected Topics in Interdisciplinary Studies*** (3 credits)

INTE 299 ***Selected Topics in Interdisciplinary Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

INTE C302 ***Lecture Series*** (3 credits)
This course provides a flexible context for study in a field of immediate or specific interest. The theme or topic discussed will vary from year to year.

INTE 398 ***Selected Topics in Interdisciplinary Studies*** (3 credits)

INTE 399 ***Selected Topics in Interdisciplinary Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

INTE C400 ***Self-Elected Specialization Tutorial*** (6 credits)
Prerequisite: Reserved for Self-Elected Specialization students in their final year. This tutorial is directed by a faculty member from a field of studies relevant to the student's programme. The faculty member will be chosen by the Director in consultation with the student concerned. The tutorial Director will supervise an intensive reading programme and assist the student in the preparation of a paper. The tutorial is intended to bring together the various fields of knowledge included in the student's programme.

INTE 498 ***Advanced Topics in Interdisciplinary Studies*** (3 credits)

INTE 499 ***Advanced Topics in Interdisciplinary Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.180 Journalism

Associate Professor and Director
LINDSAY CRYSLER

Associate Professor
ENN RAUDSEPP

Assistant Professor
ROSS PERIGOE

Sessional Instructors
SHEILA ARNOPOULOS, *Freelance Journalist and Author*
MARK BANTEY, *Lawyer*
MARIAN BRUCE, *Copy Editor, The Gazette*
MICHAEL COOKE, *Saturday Editor, The Gazette*
MICHAEL FARBER, *Columnist, The Gazette*
TOBY FYFE, *Producer, CBC-TV*
JON KALINA, *Journalist, CBC Radio and TV*
ANDREW LITTLE, *Editor, CBC-TV News*
DON McGILLIVRAY, *Columnist, Southam News Services*
MARC RABOY, *Freelance Journalist and Editor*
GAIL SCOTT, *Freelance Journalist and Author*
MINKO SOTIRON, *Freelance Writer*
GARRY STECKLES, *Entertainment Editor, The Gazette*
JAMES STEWART, *Editorial Writer, The Gazette*

ADMISSION AND GRADUATION REQUIREMENTS

Enrolment in the writing workshops in the Journalism Programme is limited and depends on the applicants' successful completion of the admission procedures outlined in the following paragraphs.

All applicants should apply through the University Admissions Office; they must also contact the Journalism Programme office at 848-2465 before March 1.

Admission procedures include: a test of English proficiency; a letter of application of about 300 words describing the student's academic and work background and aspirations in journalism; and an interview. Although it will not determine acceptance, applicants are advised that a working knowledge of French is important.

Due to enrolment limitations, priority of placement is given to students enrolled in the specific Journalism programmes.

A student must achieve a final mark of C or better in the reporting workshops in order to proceed to the next level.

To graduate with a Minor, Major or Specialization in Journalism, a student must demonstrate a working knowledge of French. Tests of oral and reading proficiency in French are administered by the Département d'Études Françaises on behalf of the Journalism programme, which is responsible for the final evaluation of each student's competence.

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

60 BA Specialization in Broadcast Journalism
NOTE: Students must meet the admission requirements of both the Department of Communication Studies and the Journalism Programme. This programme is designed to prepare graduates for the English-language media.
Stage I
15 JOUR C201[6], COMS C240[3], C278[3], C284[3]
3 Chosen from JOUR C205[3], C210[3], C215[3]
Stage II
9 JOUR C302[3], C306[3], C310[3]
6 Chosen from COMS C378[6], C381[6], C387[6]
3 JOUR C343[3]
Stage III
9 JOUR C415[3], C420[3], C446[3]
15 Chosen from Communication clusters III, IV, and V.

60 BA Specialization in Journalism and Communication
NOTE: Students must meet the admission requirements of both the Department of Communication Studies and the Journalism Programme. This programme is designed to prepare graduates for the English-language media.
Stage I
9 JOUR C201[6], COMS C240[3]
6 Chosen from COMS C275[3], C278[3], C284[3]
Stage II
12 JOUR C302[3], C303[3], C310[3], C400[3]
3 Chosen from JOUR C402[3], C404[3], C415[3]
Stage III
9 Other Journalism credits - these may not be laboratory/workshop courses
21 Chosen from Communication clusters I, III, IV, V, with a maximum of 6 credits from Cluster I.

42 BA Major in Journalism

Stage I

12 JOUR C201[6], C205[3], and C210[3] or C215[3]
6 Chosen from HIST C203[3] and C205[3]; or POLI C250[6]

Stage II

15 JOUR C302[3], C303[3], C306[3], C310[3], COMS C360[3]

Stage III

3 JOUR C400[3]
3 Chosen from JOUR C402[3], C404[3], C415[3]
3 JOUR C410[3]

30 BA Minor in Journalism

Stage I

12 JOUR C201[6], C205[3], and C210[3] or C215[3]

Stage II

9 JOUR C302[3], C303[3], C310[3]

Stage III

6 JOUR C400[3]
3 Chosen from JOUR C402[3], C404[3]
3 JOUR C410[3]

Written work in writing and reporting workshop courses is in English; please consult the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

JOUR C201 ***Writing and Reporting I*** (6 credits)
Prerequisite: Enrolment in Journalism Programme. This course gives training in basic reporting and newswriting. Students will practise writing news and will receive out-of-classroom assignments.

JOUR C205 ***History of Journalism*** (3 credits)
A history of the news media in the English-speaking world, starting with the government gazettes of seventeenth-century England and their illegal, underground competition, through the "news" papers of the eighteenth century, the rise of the yellow press, the human interest story, the penny press in the nineteenth century, down to today's corporate press. The course is designed to show that our expectations of the news media are not inherent in human nature, but are the result of historical processes that continue to evolve.

JOUR C210 ***The Media in Quebec*** (3 credits)
This course studies the special characteristics of Quebec media, focusing particularly on the historical development of Quebec journalism and the part it has played in the shaping of modern Quebec. Particular attention is given to the influence of journalists in cultural and political affairs. The recent increasing concentration of media ownership will be examined. Much of the reading material is in French.
NOTE: Students who have credit for JOUR C305 may not take this course for credit.

JOUR C215 ***Contemporary News Media*** (3 credits)
This course introduces students to the increasingly complex structures of modern media. It will examine the organizations, practices and problems of news media, focusing on key functions in their day-to-day activities. In any given year, it may explore in detail a particular development or problem in the news media.

JOUR 298 ***Special Topics in Journalism*** (3 credits)

JOUR 299 ***Special Topics in Journalism*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

JOUR C302 ***Reporting Methods*** (3 credits)
Prerequisite: JOUR C201. This course builds solid foundations for a variety of journalistic assignments: feature writing, background and in-depth reporting, analyses and investigative reporting. It is designed to help students understand and master a variety of information-gathering techniques, and overcome some of the hurdles confronting the contemporary journalist. It will cover: information sources, interpretation and use of documents, access to information, and reporting and interviewing techniques to supplement official and conventional information sources.

JOUR C303 ***Feature Writing*** (3 credits)
Prerequisite: JOUR C302. This course is designed to help students develop and enhance their writing abilities, preparing for the broadest range of journalistic feature writing, from brief colour stories and profiles to in-depth articles. It will consolidate interviewing techniques and introduce a variety of writing approaches. Students will be building the final foundations for a full spectrum of print-oriented writing assignments, preparing for advanced reporting work and the demands of specialized journalism.

JOUR C306 ***Radio News*** (3 credits)
Prerequisite: JOUR C302. Students will learn to write for newscasts and for longer broadcast formats. There will be field assignments in interviewing, tape editing, and preparation for broadcast.

JOUR C310 ***The Press and the Law*** (3 credits)
Prerequisite: Second-year standing in Journalism, or permission of the Director. Lectures will cover

those aspects of criminal and civil law which will bear most directly on the work of professional journalists - libel, slander, contempt of court.
NOTE: Students who have credit for JOUR C405 may not take this course for credit.

JOUR C343 ***Broadcast Public Affairs*** (3 credits)
Prerequisite: Enrolment in a Communication Studies or Journalism programme. This course focuses on the principles, practices and debates in Canadian public affairs, radio and television. American broadcasting is also considered. The course will also examine current affairs broadcasting in the world community.
NOTE: Students who have received credit for COMS C340, C342 or C343 may not take this course for credit.

JOUR 398 ***Special Topics in Journalism*** (3 credits)

JOUR 399 ***Special Topics in Journalism*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

JOUR C400 ***Advanced Reporting*** (3 credits)
Prerequisite: JOUR C303. Students will be introduced to several areas of specialist reporting—economics and business, public affairs, medicine and science, the arts, etc.—and to a variety of journalistic treatments: background, interpretive and investigative reporting.
NOTE: Students who have credit for JOUR C401 may not take this course for credit.

JOUR C402 ***Specialist Reporting*** (3 credits)
Prerequisite: JOUR C400. Students will cover a beat in the field of their choice for several weeks, producing news, features, and background stories. A term-end major background story will also be produced. There will be seminars and discussions, with leaders from the media on the specifics of beat coverage and on general media topics, such as trade unionism, ethics, journalistic responsibility.

JOUR C404 ***Magazine Writing*** (3 credits)
Prerequisite: JOUR C400 and a qualifying assignment. This is a workshop for students who intend to write in the burgeoning magazine field. Students will develop and apply the techniques used in a variety of magazine formats, from the highly specialized to the general: news magazines, special interest, topical or industrial publications, expansive feature formats, and internal corporate publications. It will be of particular interest to students wishing a freelance career.

JOUR C410 ***Principles of Editing*** (3 credits)
Prerequisite: JOUR C302. Lectures and workshops in the art of story editing, with an introduction to layout and design. While the material used is designed primarily for print reproduction, the techniques, and particularly the intellectual processes employed are applicable to all media.

JOUR C415 ***Television News*** (3 credits)
Prerequisite: JOUR C306. The study of and practice in the application of news writing and editing for television. Classes and field assignments will cover writing, interviewing, and editing of videotape for short television newscast items and for longer news feature formats.

JOUR C420 ***Advanced Broadcast Reporting*** (3 credits)
Prerequisite: JOUR C415. An advanced workshop in broadcast reporting, for radio and television, in the fields of Quebec affairs and contemporary social problems. A story project submitted either in written or broadcast form will be required.

JOUR C446 ***Ethics and Responsibility in Journalism*** (3 credits)
Prerequisite: Third-year standing in a Communication Studies or Journalism programme. This course considers journalism in the context of philosophical and ethical principles. It aims to assess realistically the responsibilities of reporting and news analysis and to examine critically the role of journalism in society.
NOTE: Students who have received credit for COMS C446 may not take this course for credit.

JOUR C450 ***Independent Study*** (3 credits)
Prerequisite: Enrolment in a Journalism programme. Students who have demonstrated ability may, near the end of their programme, be allowed to undertake independent study, in either research or production, in an area of special interest in Journalism. The study or project will be done in close collaboration with one or more members of the faculty.

JOUR C451 ***Independent Study*** (3 credits)
Prerequisite: Enrolment in a Journalism programme. Students who have received credit for JOUR C450 may register for JOUR C451.

JOUR 498 ***Advanced Special Topics in Journalism*** (3 credits)

JOUR 499 ***Advanced Special Topics in Journalism*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.185 Leisure Studies

Director
R. SWEDBURG, *Associate Professor*

Lecturer
A.R. SEAMAN

Recreation and leisure service meets a basic social and cultural need, and is concerned with the interrelationships among people in their environment. There is a large resource commitment to recreation and leisure at all government levels, leading to a pressing need for people to administer and develop programmes at the necessary standards of sophistication.

The programme attempts to fulfill this need and is offered to those students interested in a career in recreation and leisure services together with those students who foresee the increasing academic enquiry into the problems derived from recreation and leisure within the work ethic.

The primary focus is on managing, programming, counselling, and coordinating rather than instructing. The programme draws from the departments of Applied Social Science, Exercise Science, Geography, History, Philosophy, Psychology, Sociology and the Faculties of Commerce and Administration, and Fine Arts.

Requirements:

All students are required to complete the 10.1 entrance profile (see §31.002).

All required and elected courses within the programme should be chosen in consultation with an adviser.

Additionally it will be required that students must maintain an overall average of 2.0 in order to (1) continue into the second and third years of their studies and (2) graduate.

Students registered in the programme who are not fluent in French are strongly advised to use some of their elective credits in pursuit of French-language competence.

Upon completion of all requirements the student will receive a BA with Specialization or Major in Leisure Studies.

Students wishing to pursue a Double Major should meet with the Director.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students should consult with the Programme Director prior to registering for Leisure Studies courses.

60 BA Specialization in Leisure Studies

36 LEIS C241[3], C250[6], C426[6], C431[3], C464[6], HIST C215[3], PHIL C255[3], PSYC C286[3], SOCI C344[3]*

6 Chosen from either SOCI C310[6]* or PSYC C310[3] and PSYC C315[3]

18 Chosen from either List X or List Y

LIST X

ECON C201[3], C203[3]
MANA C266[3], C340[3]
MARK C213[3], C350[3]
ACCO C213[3], C218[3]
FINA C314[3], C315[3]

LIST Y

APSS C240[6]
ART C200[6]
EXCI C309[3], C370[6], C455[3]
GEOG C352[3], C353[3]
LEIS 298[3], 299[6], C340[3], C350[3], C393[3], 398[3]**, 399[6], C450[3], C490[3]**, C491[3]**, 498[3]**, 499[6]

42 BA Major in Leisure Studies

18 LEIS C241[3], C250[6], C426[6], C431[3]

6 Chosen from HIST C215[3]; PHIL C255[3]; PSYC C286[3]; SOCI C344[3]*

18 Chosen from either List X or Y

LIST X

ECON C201[3], C203[3]
MANA C266[3], C340[3]
MARK C213[3], C350[3]
ACCO C213[3], C218[3]
FINA C314[3], C315[3]

LIST Y

APSS C240[6]
ART C200[6]
EXCI C309[3], C370[6], C455[3]
GEOG C352[3], C353[3]
LEIS 298[3], 299[6], C340[3], C350[3], C393[3], 398[3]**, 399[6], C450[3], C490[3]**, C491[3]**, 498[3]**, 499[6]

**NOTE: To enter SOCI C310 a student must have obtained credit for SOCI C200 or equivalent; to enter SOCI C344 a student must have obtained credit for SOCI C200 or C220.*

***NOTE: In fulfillment of programme requirements students are allowed a maximum total of six credits from these courses.*

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LEIS C241 ***Recreation and Leisure in Contemporary Society*** (3 credits)
The course provides a basis for understanding recreation and leisure as increasingly important aspects of our culture. In an era of rapidly changing life styles, with a high incidence of anxiety and frustration, the value of worthy use of free time in maintaining mental and physical health is presented. Topics discussed include: motivations for participation in leisure and recreation; social, psychological and historical foundations of leisure; education for leisure; and the analysis of special problems. Lectures and seminars: 3 hours per week.

LEIS C250 ***Principles of Leisure Services*** (6 credits)
The course is concerned with the fundamental concepts governing the field of recreation and leisure. Many aspects of programme planning and development are examined, including: planning models and principles, classification, evaluation, leadership; analyses of programme models in social, cultural, physical, intellectual and adventure recreation, as they relate to the provision of services. Lectures and field study.

LEIS 298 ***Selected Topics in Leisure Studies*** (3 credits)

LEIS 299 ***Selected Topics in Leisure Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

LEIS C340 ***Industrial Recreation*** (3 credits)
Examination of the origins and development of recreation related to the place of employment. Critical analysis of the research literature in the areas of: work/leisure relationships; cost/benefits; government intervention; programme design and family involvement.

LEIS C350 ***Leisure Education*** (3 credits)
An introduction to the field of leisure education. The history and underlying philosophy of the concept is presented. The roles of the school, community and community-serving agencies are examined. Existing models are analyzed and discussed.

LEIS C393 ***Therapeutic Recreation*** (3 credits)
An examination of the basic concepts of recreational therapy in a clinical or other therapeutic setting. Recreation as a therapeutic mode is studied in relation to physical, occupational, cultural (music, art), and correctional therapies.

LEIS 398 ***Intermediate Selected Topics in Leisure Studies*** (3 credits)

LEIS 399 ***Intermediate Selected Topics in Leisure Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

LEIS C426 ***Administration of Leisure Services*** (6 credits)
Prerequisite: Enrolment in the final year of a Leisure Studies programme. Analysis of the processes involved in planning and managing leisure service delivery systems. Topics to be studied include: principles of planning, organization, zero-based budgeting, financial control, supervision. The course exposes the students, through field study, to a variety of management procedures currently used in the field. Lectures and Field Study.

LEIS C431 ***Leisure Studies Seminar*** (3 credits)
Prerequisite: Enrolment in the final year of a Leisure Studies programme. This is a third-year interdisciplinary seminar in which students can tie together all they have learned in the Leisure Studies Programme. Additionally, students will be set on a course of study that should continue after they graduate so that they can keep up with future developments in this area. Lectures: 3 hours per week or equivalent time in independent study.
NOTE: Students who have received credit for INTE C430/LEIS C430 may not take this course for credit.

LEIS C450 ***Leisure Counselling*** (3 credits)
Prerequisite: Enrolment in the second year of Leisure Studies. The application of counselling theory to the field of leisure services is considered in this course. The aims, methods, concepts and assessment tools are the focus of study. Lectures and laboratories.

LEIS C464 ***Leisure Studies Internship*** (6 credits)
Prerequisite: Enrolment in the final year of a Leisure Studies programme. In consultation with their mentors, students are given the opportunity to study theoretical and practical problems confronting professionals in the field of Recreation. The course offers a supervised period of work with a selected organization. Each student, during seminar sessions, formulates a study proposal. The practicum commences when the proposal has been approved. The course involves a minimum of a six-week 240-hour period.

LEIS C490 ***Independent Study I*** (3 credits)
Prerequisite: Permission of the Programme Director. Students will work on topics in consultation with a study supervisor. The study may include readings, field studies, and/or research.

LEIS C491 ***Independent Study II*** (3 credits)
Prerequisite: Permission of the Programme Director. A student who has received credit for LEIS C490 may register for LEIS C491.

LEIS 498 ***Advanced Topics in Leisure Studies*** (3 credits)

LEIS 499 ***Advanced Topics in Leisure Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

NOTE: The abbreviation for Leisure Studies used in course numbering has been changed from LEIS to LESR effective Summer, 1986.

31.190 Library Studies

Director
A.M. GALLER, *Associate Professor*

Assistant Director
J. LOCKE, *Assistant Professor*

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

36 BA Major in Library Studies
6 LIBS C201[3], C202[3]
15 LIBS C303[3], C305[3], C320[3], C325[3], C330[3]
9 LIBS C331[3], C345[3], C495[3]
6 LIBS electives in consultation with the Programme Director

60 Certificate in Library Studies
30 LIBS C201[3], C202[3], C303[3], C305[3], C320[3], C325[3], C330[3], C331[3], C345[3], C495[3]
6 LIBS electives in consultation with the Programme Director
24 Electives

NOTE: All Library Studies students must take C201 and C202 as prerequisites to all other Library courses, the only exception being LIBS C411 and C461.

The Library Studies Programme offers a *Major in Library Studies* to those who wish to pursue a career in library work at a non-graduate level. For those interested in taking advanced studies at the Master's level, a Double Major will be necessary. (36 credits are required in Library Studies for a Major.)

All new applicants must be interviewed by the Director or Assistant Director. Appointments may be made at the Library Studies Office, 7079 Terrebonne Ave., Montreal West. All students must preregister with the Programme and obtain course approval prior to the date of registration.

Students will be expected to maintain an average of 65% throughout the Programme.

The Certificate in Library Studies is offered to meet the needs of students who may not wish to fulfill the requirements of a Bachelor of Arts degree. All courses in the Programme are 3-credit courses. Sixty (60) credits are required to complete the Certificate Programme, thirty-six (36) of which consist of Library Studies, with twenty-four (24) credits of electives. Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Diploma in Library Studies

The Department also offers a diploma programme for students who have completed their undergraduate degree in another field. Detailed information on the programme is given in the University's Calendar of Graduate Studies.

Prerequisites To All Other Courses

LIBS C201 Principles of Library Service (3 credits)

LIBS C202 Organization of Library Services (3 credits)

LIBS 298 Selected Topics in Library Studies (3 credits)

LIBS 299 Selected Topics in Library Studies (6 credits)

Required Courses

LIBS C303 Information Services (3 credits)

LIBS C305 Bibliographic Searching (3 credits)

LIBS C320 Cataloguing and Classification Part I (3 credits)

LIBS C325 Cataloguing and Classification Part II (3 credits)

LIBS C330 Cataloguing and Classification III (3 credits)

LIBS C331 Data Processing and Automation (3 credits)

LIBS C345 Technical Skills - Collection Control (3 credits)

Electives

LIBS 398 Selected Topics in Library Studies (3 credits)

LIBS 399 Selected Topics in Library Studies (6 credits)

LIBS C407 Research Methodology (3 credits)

LIBS C409 Library Research and Library Resources in Science and Technology (3 credits)

LIBS C410 Computer Applications in Libraries (3 credits)

LIBS C411 Library Service and Work with Children (3 credits)

LIBS C421 Library Service and Work in Schools (3 credits)

LIBS C432 Library Service and Work in the College and University (3 credits)

LIBS C433 Technical Skills - Multi-Media Operations (3 credits)

LIBS C435 The Organization of Audiovisual Collections (3 credits)

LIBS C441 Library Service and Work in Business and Industry (3 credits)

LIBS C451 Library Service and Work in the Public Library (3 credits)

LIBS C461 Library Service and Work with the Young Adult (3 credits)

LIBS 498 Advanced Topics in Library Studies (3 credits)

LIBS 499 Advanced Topics in Library Studies (6 credits)

Final Required Course

LIBS C495 Field Practice (3 credits)

Recommended Academic Electives

FRAN C316 Le français de la bibliothéconomie I (3 crédits)

FRAN C317 Le français de la bibliothéconomie II (3 crédits)

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

LIBS C201 ***Principles of Library Service*** (3 credits)
This course, which is the prerequisite to all others in the programme, lays the groundwork for the development of sound supportive staff in libraries. The objectives of library service, the effective use of the library, its basic tools and terminology, and the skills and duties required of the library technician in the library organization will be introduced as they relate to the principles of librarianship.
NOTE: Students may be required to bear some of the cost of materials.

LIBS C202 ***Organization of Library Services*** (3 credits)
Prerequisite: LIBS C201. This course is primarily concerned with the introduction of the skills and sources needed to utilize library resources and research a term paper, and with the bibliographic form used in documenting research. The course also outlines both internal library functions and organizations, and some of the ways in which libraries cooperate.
NOTE: Students may be required to bear some of the cost of materials.

LIBS 298 ***Selected Topics in Library Studies*** (3 credits)

LIBS 299 ***Selected Topics in Library Studies*** (6 credits)

Specific topics for these courses will be stated in the Course Timetable. Prerequisites relevant in each case to be discussed with the Programme Director.

LIBS C303 ***Information Services*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. This course will examine the basic informational services given in all types of libraries. Standard general reference works will be studied to enable the student to work under a professional librarian in the Information Services Department of a library.

LIBS C305 ***Bibliographic Searching*** (3 credits)
Prerequisite: LIBS C201; LIBS C202; LIBS C303. This course will provide a broad introduction to bibliographic searching. General and subject bibliographies as well as indexes and directories will be studied to enable the student to use the library's resources effectively. Procedures relating to

verifying and searching will be studied in detail as they relate to ordering, cataloguing, and inter-library loans. The mechanics of literature searching, both manual and automated, in any subject field will be introduced. The main emphasis in this course will be on the study of bibliographical sources to enable the student to work in a library as a bibliographical searcher.
NOTE: Students will be required to bear the costs of the on-line searching.

LIBS C320 ***Cataloguing and Classification I*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. This course is designed to give the student a basic knowledge of book and serial cataloguing. Coverage includes: pre-cataloguing routines, the composition of catalogue cards, descriptive cataloguing as well as introduction to automated cataloguing using UTLAS EDUCATSS as a complete system. Weekly laboratory sessions, assignments, and readings are required. A knowledge of typing is essential.
NOTE: Students will be required to bear the costs of on-line searching.

LIBS C325 ***Cataloguing and Classification II*** (3 credits)
Prerequisite: LIBS C201; LIBS C202; LIBS C320. This course is designed to give the student, who possesses a thorough understanding of descriptive cataloguing, a basic knowledge of and ability to assign subject headings. Sears and Library of Congress Subject Headings will be studied in depth. MARC formats and coding of machine-readable cataloguing records will also be examined. There will also be demonstrations of the UTLAS CATSS system. Weekly laboratory sessions, assignments and readings are required.
NOTE: Students will be required to bear the costs of on-line searching.

LIBS C330 ***Cataloguing and Classification III*** (3 credits)
Prerequisite: LIBS C201; LIBS C202; LIBS C320. This course will familiarize the student with the Dewey Decimal as well as the Library of Congress classification systems. Topics covered will include coding, editing and in-putting of information for computerized cataloguing systems, understanding commonly used types of catalogue formats and methods of creating cataloguing records. Formal instruction is accompanied by practical assignments in the cataloguing laboratory.
NOTE: Students will be required to bear the costs of on-line searching.

LIBS C331 ***Data Processing and Automation*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. A basic introduction to the use of computers and a systems approach in solving library problems. Students will receive instruction in flowcharting, and other concepts of systems design and data processing. Automated library applications, services, and networks will be considered. A tour of an automated library or a data centre will provide an insight into the routine technical activities undertaken by, or on behalf of, the library staff. No previous knowledge of or experience in mathematics, business administration, or data processing is required.

LIBS C345 ***Technical Skills - Collection Control*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. The course is designed to provide the student with a thorough understanding of library practices and procedures as related to the acquisition, organization, circulation, housing, and maintenance of library collections. This will include monographs, serials, government publications, technical reports, and pamphlet materials. The student will study circulation control systems and circulation functions including loan policies and procedures, inter-library loans, reserves, overdues, statistics, inventory control, and library security.
NOTE: Students will be required to bear the cost of materials.

LIBS 398 ***Selected Topics in Library Studies*** (3 credits)

LIBS 399 ***Selected Topics in Library Studies*** (6 credits)

Specific topics for these courses will be stated in the Course Timetable. Prerequisites relevant in each case to be discussed with the Programme Director.

LIBS C407 ***Research Methodology*** (3 credits)
Prerequisite: LIBS C303; LIBS C305. The aim of this course is to develop an understanding and appreciation of research methods and approaches specific to subject disciplines, based on the consideration of general principles of research methodology and the planning of logical research strategies. The library-oriented approach ensures a solid background of data from which problems may be attacked and solutions derived. Topics covered in logical progression include: selecting and defining the problem; planning the research programme; developing and testing hypotheses; collecting, classifying, evaluating, and analyzing evidence; drawing conclusions; presenting results. The course assumes general knowledge of reference and bibliographic sources for at least one academic discipline. Students will be evaluated principally on a term paper related to a research strategy, and methods applied to a problem of their own choosing, and on class participation.

LIBS C409 ***Library Research and Library Resources in Science and Technology*** (3 credits)
Prerequisite: LIBS C201; LIBS C202; or enrolment in a Major in science or engineering. The course is designed to introduce Science and Engineering undergraduates, as well as the Library Studies student, to the structure of scientific literature, to the basic types of information sources in Science and Technology, and to information networks, and computer-based retrieval systems. The student will also become familiar with search strategies and indexing techniques. Emphasis will be placed on developing skills in the student's particular discipline or interest.
NOTE: Students will be required to bear the costs of on-line searching.

LIBS C410 ***Computer Applications in Libraries*** (3 credits)
Prerequisite: LIBS C303; LIBS C305; LIBS C331. A theoretical and practical introduction to the operation and use of online information retrieval systems and types of equipment most commonly encountered in North American information centres.Students will become familiar with database file structure, vocabulary control, Boolean logic, and the techniques of searching both numeric and bibliographic databases, e.g., DIALOG, ORBIT, CAN/OLE, BRS and INFOGLOBE.
NOTE: Students will be required to bear the costs of on-line searching.

LIBS C411 ***Library Service and Work with Children*** (3 credits)
Prerequisite: LIBS C201; LIBS C202, or permission of the Director. The course is designed to introduce the student to the major genres of children's literature. The student examines the methods used in the library to stimulate the child's love of reading and evaluates children's literature through assignments, films and a field trip to a children's library.

LIBS C421 ***Library Service and Work in Schools*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. The duties and responsibilities of the library assistant, library technician and teacher-librarian will be discussed. Topics include programmes for teaching the use of the library, methods for cooperating with teachers, the assembling of materials for instructional units, responding to curriculum demands upon the library, and examining the effects of new curriculum trends in education upon the school library/resource centre.

LIBS C432 ***Library Service and Work in the College and University*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. The organization, administration, and functions of academic libraries will be studied, with special references to curriculum-oriented library service, and to services relating to large academic research libraries and library colleges.

LIBS C433 ***Technical Skills - Multi Media Operations*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. This course will be mainly practical in nature. It will provide the student with the opportunity to operate a broad range of audio-visual equipment found in the modern media centre. It will also introduce the student to the concept of audio-visual media as instructional tools within the library/media centre, by requiring the design, development and evaluation of an instructional audio-visual project on some aspect of library studies.
NOTE: Students will be required to bear the costs of materials.
NOTE: Students who have received credit for LIBS C333 may not take this course for credit.

LIBS C435 ***Organization of Audio-Visual Collections*** (3 credits)
Prerequisite: LIBS C320. All aspects of audio-visual materials available in public, university, school and special libraries will be studied. The student will be introduced to basic reference sources, aids for acquisition, ordering, storage and circulation. Coverage will also include pre-cataloguing routines and MARC coding. Materials featured will be those frequently found in libraries, such as records, cassettes, films, kits and slides as well as those which are becoming more common such as microforms, video-cassettes and video-tapes as well as computer programmes and software.
NOTE: Students will be required to bear the costs of on-line searching.

LIBS C441 ***Library Service and Work in Business and Industry*** (3 credits)
Prerequisite: LIBS C201; LIBS C202. The role of the library in relation to business and industry will be examined. The specific skills and devices employed to provide direct information to the users will be explored. Management and administrative concerns will be reviewed from the viewpoint of the library and the sponsoring organization.
NOTE: Students will be required to bear the costs of on-line searching.

LIBS C451 ***Library Service and Work in the Public Library*** (3 credits)
Prerequisite: LIBS C201; LIBS C202, and permission of Director. This course traces the development of the public library, particularly in Quebec. It deals with the objectives, roles, and functions of public library service in contemporary society. Topics such as freedom of access to information, copyright, public lending right, and collection and preservation of library materials will be explored.

LIBS C461 ***Library Service and Work with the Young Adult*** (3 credits)
Prerequisite: LIBS C201; LIBS C202, or permission of the Director. This course will explore through books the major phenomena of the teenager's world. Some of the skills needed to serve young adults in a library setting will be examined. Literature written especially for young adults, and some adult literature which is especially popular with, and suitable for, young people, will be studied. A pre-course reading list is available.

LIBS C495 ***Field Practice*** (3 credits)
Prerequisite: Completion of all other required library studies courses. In consultation with the appropriate supervising librarian the student will be placed by the Programme Director in a local library system other than in a library in which the student is employed. The duration of the field practice will be five weeks. Field practice will include a wide variety of library tasks. In addition the student will be required to complete a written research project on a topic approved by the Programme Director.

LIBS 498 ***Advanced Topics in Library Studies*** (3 credits)

LIBS 499 ***Advanced Topics in Library Studies*** (6 credits)

Specific topics for these courses will be stated in the Course Timetable. Prerequisites relevant in each case to be discussed with the Programme Director.

31.200 Mathematics

Chairman
M.A. MALIK, *Associate Professor*

Professors
A. BOYARSKY
T.D. DWIVEDI
R. HALL
Z. KHALIL
H. KISILEVSKY
R. MOODY
R. RAPHAEL
J.A. SENEZ
M.E. SZABO
D. WHEELER

Associate Professors
L.S. ADLER
S. ALI
K.K. ANAND
M.M. BELINSKY
M.V. BOBETIC
A. BOSWALL
M.A. BRIAN
J. BRODY
W. BYERS
Y. CHAUBEY
G.E. COHEN
M. COHEN
S. ERLWANGER
J.C. HAYES
N. HERSCOVICS
J. HILLEL
A. KEVICZKY
H. KIM
G.S. LINGAPPAIAH
A.J. PRILLO
H. PROPPE
R. SMITH
J. SORIC
T.N. SRIVASTAVA
R. STERN
J.C. TURGEON
Y.H. WANG
M. ZAKI

Adjunct Associate Professors
M.R.Y. CHEN
H. HUNG
A.S. RAO
J. SELDIN

University Research Fellow
V.K. MURTY

Lecturers
D. MORIN-WAHHAB
T.Y. WONG

A student wishing to follow a Mathematics Programme but not meeting the entrance requirements should consult with the Department.

By careful choice of electives, students can select whether the emphasis of the programme will be in the area of Pure Mathematics, Applied Mathematics or Statistics.

Students who already had Honours status by June 1st, 1977 will continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

Students in a Mathematics programme may not take any of the following courses for credit: EMAT 212, 232, 252, 271. Students wishing to take other Engineering Mathematics courses for credit must obtain prior approval of the Department.

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

66 BA or BSc Honours in Mathematics
48 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C362[3], C363[3], C366[3], C393[3], C394[3], C464[3], C467[3], C491[3]
12 MATH chosen with prior departmental approval from MATH C322[3], C334[3], C373[3], C381[3], C382[3], C392[3], C466[3], C475[3], C492[3], C496[3]
6 MATH chosen with prior departmental approval.

60 BA or BSc Specialization in Mathematics
39 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C362[3], C363[3], C366[3], C393[3], C394[3]
15 MATH chosen with prior departmental approval from MATH C322[3], C334[3], C373[3], C381[3], C382[3], C392[3], C464[3], C466[3], C467[3], C491[3]
6 MATH chosen with prior departmental approval

36 BA or BSc Major in Mathematics
30 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C362[3], C393[3]
6 MATH chosen with prior departmental approval from MATH C322[3], C363[3], C366[3], C373[3], C382[3], C392[3], C394[3]

66 BA or BSc Honours in Statistics
51 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C348[3], C351[3], C362[3], C363[3], C443[3], C448[3], C454[3], C464[3], C467[3]
9 MATH chosen with prior departmental approval from MATH C334[3], C342[3], C343[3], C347[3], C353[3], C445[3], C451[3]
6 MATH chosen with prior departmental approval

60 BA or BSc Specialization in Statistics
45 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C348[3], C351[3], C362[3], C363[3], C443[3], C448[3], C454[3]
9 MATH chosen with prior departmental approval from MATH C334[3], C342[3], C343[3], C347[3], C353[3], C445[3], C451[3]
6 MATH chosen with prior departmental approval

36 BA or BSc Major in Statistics
30 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C348[3], C448[3]
6 MATH chosen with prior departmental approval from MATH C342[3], C343[3], C347[3], C351[3], C353[3], C443[3], C454[3]

66 BA or BSc Honours in Actuarial Mathematics
57 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C311[3], C326[3], C327[3], C336[3], C337[3], C348[3], C362[3], C363[3], C427[3], C448[3], C464[3]
6 MATH C229[2], C329[2], C429[2]
3 MATH chosen with prior departmental approval from MATH C428[3], C443[3], C467[3]

60 BA or BSc Specialization in Actuarial Mathematics
54 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C311[3], C326[3], C327[3], C336[3], C337[3], C348[3], C362[3], C363[3], C427[3], C448[3]
6 MATH C229[2], C329[2], C429[2]

66 BA or BSc Honours in Applied Mathematics
54 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C311[3], C336[3], C337[3], C362[3], C363[3], C371[3], C436[3], C437[3], C464[3], C467[3]
12 MATH or cognate disciplines chosen with prior departmental approval

60 BA or BSc Specialization in Applied Mathematics
48 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C311[3], C336[3], C337[3], C362[3], C363[3], C371[3], C436[3], C437[3]
12 MATH or cognate disciplines chosen with prior departmental approval

36 BA or BSc Major in Applied Mathematics
30 MATH C231[3], C241[6], C261[6], C271[3], C281[6], C336[3], C436[3]
6 MATH chosen with prior departmental approval from MATH C311[3], C312[3], C337[3], C371[3], C373[3], C432[3], C437[3]

24 Minor in Mathematics
24 MATH C231[3], C241[6], C261[6], C271[3], C281[6]

24 Minor in Statistics
24 MATH C231[3], C241[6], C281[6], C343[3], C348[3], C448[3]

24 Minor in Mathematics for Students in BA Programmes
24 MATH credits approved by the Department of Mathematics. At least 12 credits must be at the level of MATH C231 or above.

NOTE: Students in BA programmes are also eligible for a regular Minor in Mathematics or Statistics provided they have the necessary prerequisites.

The Department also offers to practising teachers the following undergraduate programmes:

30 Certificate in Mathematics for Teachers (Elementary School Level)
6 MATH C305[6]
24 Chosen from MATH C300[6], C301[6], C302[6], C303[6], C304[6], C307[3], C309[3]

NOTE: Where students have completed similar courses in previous studies, pro tanto credits may be approved up to a maximum of 12 credits. In some cases, students with fewer than 12 pro tanto credits may, with approval of the Faculty of Arts and Science obtained upon the recommendation of the programme director, be permitted to take courses in related areas for credit towards the certificate. However, at least 18 of the credits must be taken within the programme.

30 Certificate in Mathematics for Teachers (Junior Secondary School Level)
15 MATH C400[3], C401[6], C404[6]
15 Chosen from MATH C402[3], C403[3], C405[3], C406[3], C408[3], C409[3], C410[3], C411[3], C417[3], C419[3]

NOTE: In some cases where students have completed similar mathematical courses in previous studies, the Mathematics Department may modify a student's programmes to meet his professional requirements. It may grant pro tanto credits up to a maximum of 12 credits.

For further details about the Certificate Programmes, see §31.290.

MATHEMATICS CO-OPERATIVE PROGRAMME

Director
L.S. Adler, *Associate Professor*

The Mathematics Co-Operative Programme is offered to students who are enrolled in the B.A. or B.Sc. Honours or Specialization in Applied Mathematics or Statistics, or B.A. or B.Sc. Specialization in Actuarial Mathematics.

Students in Mathematics Co-Op take the regular academic programme. The schedule of academic and work periods for an entering group of Mathematics Co-Op students is given in §31.510.

The overseeing of the Mathematics Co-Op Programme is the responsibility of the Director of the Mathematics Co-Operative programme and the departmental Co-Op Committee which provides the connecting link between students, employers and the Centre for Co-Operative Education.

Students interested in applying for Mathematics Co-Op should refer to §31.510 where a full description of the admission requirements is provided or write to The Director, Centre for Co-Operative Education, 7308 Sherbrooke Street West, Montreal, Quebec, H4B 1R6. For information by telephone see "CONTACTS" in §31.510.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

MATH C200 ***Fundamental Concepts of Algebra*** (3 credits)
This course is designed to give students the background necessary for MATH C201. Some previous exposure to algebra is assumed. Sets, algebraic techniques, inequalities, graphs of equations.
NOTE: Students who have credit for MATH C201 or equivalent may not take this course for credit.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C201 ***Elementary Functions*** (3 credits)
Sets, inequalities, graphs of functions, and relations. Trigonometric, exponential, and logarithmic functions. Lectures and laboratory.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C202 ***College Algebra*** (3 credits)
Progressions, combinations, permutations, binomial theorem, mathematical induction, inequalities, polynomials, cartesian and polar forms of complex numbers; conics.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C203 ***Differential and Integral Calculus I*** (3 credits)
Prerequisite: MATH C201, or equivalent. Functional notation. Differentiation of polynomials. The power, product, quotient, and chain rules. Differentiation of elementary functions. Implicit differentiation. Higher derivatives. Maxima and minima. Applications: tangents to plane curves, graphing, related rates. Approximations using the differential. Antiderivatives, definite integrals, area. Lectures and laboratory.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C204 ***Vectors and Matrices*** (3 credits)
Prerequisite: MATH C202 or equivalent. Algebra and geometry of vectors, dot and cross products, lines and planes. System of equations, operations on matrices, rank, inverse, quadratic form and rotation of axis.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C205 ***Differential and Integral Calculus II*** (3 credits)
Prerequisite: MATH C203. Techniques of integration: substitutions, integration by parts, partial fractions. Improper integrals. Physical applications of the definite integral. Infinite series: tests for convergence. Power series, Taylor's theorem. Lectures and laboratory.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C206 ***Algebra and Functions*** (3 credits)
Coordinate systems. Radicals and distance formula. Polynomials, factoring and graphing. Relations and functions. Linear and quadratic functions, equations and systems. Exponents, exponential and logarithmic functions and equations.
NOTE: Students who have received credit or exemption for a course at the level of MATH C201 or above may not take this course for credit.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C207 ***Statistics for the Social Sciences*** (3 credits)
Prerequisite: MATH C206 or equivalent, or permission of the Department of Mathematics. Elementary probability, permutations and combinations, binomial and normal distribution. Analysis and organization of statistical data. Tests of hypotheses. Confidence limits. Introduction into linear regression and correlation. Lectures and laboratory. *NOTE See §200.7*
NOTE: Students with credit for MATH C241 or equivalent may not take this course for credit.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C208 ***Fundamental Mathematics I*** (3 credits)
Prerequisite: MATH C206, or equivalent. This course is intended primarily for pre-Commerce students. Matrices, Gaussian elimination, input-output analysis, progressions, compound interest, annuities, permutations and combinations, probability, binomial theorem, exponential and logarithmic functions, inequalities; linear programming.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C209 ***Fundamental Mathematics II*** (3 credits)
Prerequisite: MATH C206, or equivalent. This course is intended primarily for pre-Commerce

students. Limits, differentiation of rational, exponential, and logarithmic functions, theory of maxima and minima, integration.
NOTE: Students who have received credits for MATH C203 or equivalent may not take this course for credit.
Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C210 ***Mathematics for the Biological Sciences I*** (3 credits)
Prerequisite: CEGEP Mathematics 103, or equivalent. Discrete probability, probability distributions, difference equations, differential equations, transients, steady-state solutions, system concept, block diagrams, linear programming, game theory. Markov chains, applications to ecology, population models, physiology.

MATH C211 ***Fundamental Mathematics III*** (3 credits)
Prerequisite: MATH C209. This course is intended primarily for pre-Commerce students. Functions of two variables, partial derivatives, maxima and minima; iterated integrals; difference and differential equations, Taylor polynomials, root approximations, numerical integration.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

MATH C215 ***Ideas in Mathematics I*** (3 credits)
A course for students registered in a programme other than one leading to the B.Sc. degree. The course endeavours to reveal the extent and power of mathematics and to give some insight into its historical development. The topics chosen will be presented in a way that requires a minimal mathematics background. This course has no formal prerequisites and does not serve as a prerequisite for any other course in Mathematics. Students should consult with the Department before registering for this course.

MATH C216 ***Ideas in Mathematics II*** (3 credits)
A course for students registered in a programme other than one leading to the B.Sc. Degree. The course objectives are identical to those of MATH C215, but different topics are covered. This course has no formal prerequisites and does not serve as a prerequisite for any other course in Mathematics. Students should consult with the Department before registering for this course.

MATH C220 ***Mathematical Methods in Chemistry*** (3 credits)
Prerequisite: CEGEP Mathematics 203, or equivalent. Partial derivatives. First-order differential equations (first- and second-order chemical reactions). Hermite, Laguerre, and Legendre equations. Solutions by power series. Eigen-functions and eigenvalues, Sturm-Liouville Theory.

MATH C225 ***Introduction to Actuarial Mathematics*** (3 credits)
Prerequisite: MATH C202 or MATH C208; MATH C203 or MATH C209 or equivalent. Simple-interest, compound interest, force of interest; annuities-certain, continuous annuities-certain, perpetuities; amortization and sinking funds, graduated mortgage schemes; bonds and related securities; capital cost and depletion. Brief introduction to life insurance.

MATH C229 ***Workshop in Actuarial Mathematics I*** (2 credits)
Prerequisite: MATH C261; MATH C281 previously or concurrently or permission of the Department. This workshop is intended to prepare students for the General Mathematics Examination of the Society of Actuaries and the Casualty Actuarial Society. Special topics from calculus, introductory real analysis, and linear algebra which are not normally included in first courses are covered with the instructor. Students will work in small groups on problems taken from sample examinations of the Society and other sources.

MATH C231 ***Introduction to Applied Mathematics*** (3 credits)
Prerequisite: MATH C281, previously or concurrently. Introduction to the theory of optimization, linear programming, the Simplex Method. Deterministic and stochastic models for growth processes. Introduction to graphs and networks. Applications.
NOTE: Only 3 credits will be awarded from MATH C231, QUAN C313, ENGR C412.

MATH C232 ***Computing in Mathematics*** (3 credits)
Prerequisite: CEGEP Mathematics 105; CEGEP Mathematics 203; or equivalent. Introduction to APL, primitive and dyadic operators, simple and mixed functions. Programming and editing, dealing with workspaces. Applications to calculus (sequences, series, convergence and integrals), to statistics (simulations, combinatorics and distributions) and to algebra (systems of equations, matrices and non-linear equations).

MATH C241 ***Introduction to Statistics*** (6 credits)
Prerequisite: CEGEP Mathematics 203, or equivalent. Fundamental concepts of probability, probability distribution, sample statistics, estimation of parameters, test of hypotheses, regression and correlation. *NOTE See §200.7*

MATH C261 ***Advanced Calculus*** (6 credits)
Prerequisite: CEGEP Mathematics 105; CEGEP Mathematics 203, or equivalent. Functions of several variables, partial derivatives, maxima and minima, vector functions, multiple integrals, line and surface integrals and related topics.

MATH C271 ***Differential Equations I*** (3 credits)
Prerequisite: CEGEP Mathematics 105; CEGEP Mathematics 203. Separable equations, exact equations, integrating factors, force fields, first-order linear equations, input-output concept, second-order equations, reduction of order, variation of parameters, nth-order linear equations with constant coefficients, Laplace transforms, block diagrams and signal-flow graphs.

MATH C281 ***Linear Algebra I*** (6 credits)
Prerequisite: CEGEP Mathematics 105, or permission of the Department. The theory of matrices as related to the solution of linear equations, matrices as an algebraic system, orthogonality and application to linear differential equations, linear inequalities and maximization problems, vector spaces.

MATH C290 ***Algebraic Systems (Introduction)*** (3 credits)
Prerequisite: Collegial pre-Science Mathematics profile or equivalent. Sets, functions, binary operations, examples of number systems, polynomial functions, divisibility, definitions and examples of groups and subgroups, fields.

MATH 298 ***Selected Topics in Mathematics*** (3 credits)

MATH 299 ***Selected Topics in Mathematics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

MATH C300 ***Mathematics for Elementary School Teachers I*** (6 credits)
This course and the following course (C301) are designed to cover the main mathematical topics in the programme-cadre for elementary schools. In both courses, the study of the mathematical content will be linked to thorough consideration of classroom applications. A project will be included among the assignments in both courses. In both courses, the mathematical language of sets, relations, functions, and operations will be applied where appropriate, and various modes of graphical representation used. Counting numbers and systems of numeration, number operations, factors and multiples, numbers as measures, classification and properties of geometrical shapes.
NOTE: This course is available only to practising teachers.

MATH C301 ***Mathematics for Elementary School Teachers II*** (6 credits)
This course and the preceding course (C300) are designed to cover the main mathematical topics in the programme-cadre for elementary schools. In both courses, the study of the mathematical content will be linked to thorough consideration of classroom application. A project will be included among the assignments in both courses. In both courses, the mathematical language of sets, relations, functions, and operations will be applied where appropriate, and various modes of graphical representation used.
The extension of the number system to fractions, decimals, and signed numbers. Equalities and inequalities, bases of symmetry and geometric transformations.
NOTE: This course is available only to practising teachers.

MATH C302 ***Transformation Geometry*** (6 credits)
Prerequisite: MATH C301 or permission of the Department. A more advanced study of symmetry and geometric transformations, applications in 2 and 3 dimensions, an overview of a K-6 programme of geometry.
NOTE: This course is available only to practising teachers.

MATH C303 ***Measurement*** (6 credits)
Prerequisite: MATH C300 or permission of the Department. A more advanced study of measures and measurement, descriptive statistics, and elementary notions of probability, an overview of a K-6 programme of measurement.
NOTE: This course is available only to practising teachers.

MATH C304 ***Mathematics for Elementary School Teachers III*** (6 credits)
Prerequisite: Permission of the Department. More advanced mathematical studies to meet the needs of potential developments in the elementary school curriculum.
NOTE: This course is available to practising teachers only.

MATH C305 ***Psychology of Mathematics Education*** (6 credits)
Prerequisite: Any three chosen from MATH C300, C301, C302, C303, C304; or permission of the Department. The content of the course will be selected from those areas of psychological theory and research which have implications for the teaching of mathematics. It will normally include: psychological theories of cognition, studies of mathematical learning in children, motivation, applications of research to the classroom.
NOTE: This course is available only to practising teachers.

MATH C307 ***Microcomputer Applications to Mathematics Education I*** (3 credits)
Prerequisite: Permission of the Department. Elements of programming of the LOGO language. An introduction to TURTLE graphics. Recursion as a simplifying and generating tool. Applications to the teaching of elementary arithmetic and geometry. Design of programmes to produce graphic displays and simple instructional sequences.
NOTE: This course is available to practising teachers only.

MATH C309 ***Microcomputer Applications to Mathematics Education II*** (3 credits)
Prerequisite: MATH C207 or permission of the Department. More advanced programming in the LOGO language. Further study of TURTLE graphics. List processing, editing and developing procedures. Applications to the teaching of algebra and geometry. Production of inter-active programmes. Consideration of LOGO as an educational environment.
NOTE: This course is available to practising teachers only.

MATH C310 ***Mathematics for the Biological Sciences II*** (3 credits)
Prerequisite: MATH C210, or equivalent. Continuous probability, stochastic processes, population models, systems of linear difference and differential equations, Laplace transforms, signal-flow graphs, systems trajectories, stability, applications to ecology and biology.

MATH C311 ***An Introduction to Numerical Analysis*** (3 credits)
Prerequisite: CEGEP Mathematics 105; CEGEP Mathematics 203; MATH C232 or COMP C211; or equivalent. Error analysis and computer arithmetic. Numerical methods for solving linear systems, Gaussian elimination, LU decomposition. Numerical solution of non-linear equations, fixed point iterations, rate of convergence. Interpolations and approximations, Lagrange polynomials, divided differences, discrete least-square approximation, Legendre polynomials. Numerical integration, Newton-Cotes formulas, Romberg integration.

MATH C312 ***Numerical Analysis*** (3 credits)
Prerequisite: MATH C311 or COMP C361 or equivalent; MATH C261; MATH C281 or equivalent. Linear Systems: Cholesky decomposition for positive definite systems; tridiagonal case. Orthogonal factorizations: Householder matrices, least-square solutions for overdetermined systems. Data fitting: piecewise, splines, continuous least-squares. Quadrature: infinite intervals, orthogonal polynomials, Gaussian quadrature. Differential equations: systems of ODE's, predictor-corrector formula, stability, error analysis. Eigenvalue problem: Bisection, deflation, tridiagonalization, inverse iteration.

MATH C322 ***Mathematical Logic*** (3 credits)
Prerequisite: 18 credits in post-Collegial Mathematics. This course deals with the mathematical ideas and techniques required to state and prove one of the most spectacular theorems of modern mathematics: Godel's incompleteness theorem establishing the non-algorithmic nature of Arithmetic and, hence, of most of higher mathematics. The subject involves the study of formal languages and recursive functions and is suitable for students interested in computer science.

MATH C326 ***Theory of Interest*** (3 credits)
Prerequisite: MATH C261; MATH C281. Measurement of interest; annuities, amortization, schedules and sinking funds; bonds and securities; capital cost and depletion; life insurance.

MATH C327 ***Life Contingencies I*** (3 credits)
Prerequisite: MATH C326. Measurement of Mortality: survival function, mortality tables, force of mortality; special topics.

MATH C329 ***Workshop in Actuarial Mathematics II*** (2 credits)
Prerequisite: MATH C229; MATH C241; MATH C337 previously or concurrently, or permission of the Department. This workshop is intended to prepare students for the Society's Examination 2 (Probability and Statistics). Students will work with an instructor on special topics required for these examinations and not covered in other courses of the programme. Instruction will be supplemented by regular problem sessions on the entire contents of the examinations.

MATH C332 ***Introduction to Game Theory*** (3 credits)
Prerequisite: 18 credits in post-Collegial Mathematics. Matrix games. Strategies. Optimum stategies and the value of a game. Strictly determined games, Non-strictly determined games and linear programming. Applications. Further material according to interest of instructor and students.

MATH C334 ***Combinatorics*** (3 credits)
Prerequisite: 18 credits in post-collegial mathematics. General principle of counting, permutations, combinations, identities, generating functions; Fibonacci numbers; partitions, recurrence relationships, Stirling numbers, Catalan numbers, principle of inclusion-exclusion, cycles of a permutation, orbits of permutation groups, parity of a permutation, Polya's theorem.

MATH C336 ***Linear Programming*** (3 credits)
Prerequisite: MATH C231. Convex sets and convex functions, polyhedral sets and cones, degeneracy and cycling, the revised Simplex method, sensitivity and parametric analysis, the transporation and assignment problems, minimal cost network flows, maximal flow problems; integer programming.

MATH C337 ***Introduction to Stochastic Methods of Operations Research*** (3 credits)
Prerequisite: MATH C231; MATH C241. Random variables, distributions, conditional probability, conditional expectations; Markov decision process and applications; inventory theory; applications in queueing systems.
NOTE: Students who have received credit for QUAN C314 may not take this course for credit.

MATH C342 ***Quality Control and Industrial Statistics*** (3 credits)
Prerequisite: MATH C241 or permission of the Department. Concepts of statistical control; X, R, P, and C charts; acceptance-sampling inspection, continuous-sampling plans, reliability and life tests.

MATH C343 ***Sample Surveys*** (3 credits)
Prerequisite: MATH C241 or permission of the Department. Simple random sampling, stratified random sampling, systematic sampling, multi-stage sampling, regression and ratio estimates, non-sampling errors.

MATH C347 ***Non-Parametric Statistical Methods*** (3 credits)
Prerequisite: MATH C241. Chi-square and Kolmogorov-Smirnov Goodness-of-Fit tests, the sign, rank, and Mann-Whitney Wilcox tests for one and two samples, Kruskal-Wallis tests for k-samples, rank correlation and Kendall's TAU statistics, computer packages.

MATH C348 ***Regression and Correlation*** (3 credits)
Prerequisite: MATH C241. Simple, multiple and polynomial regression, least square estimations, Gauss-Markov theorem; analysis of residuals; analysis of binary data; multi-collinearity, auto-correlation models; step-wise regression; multivariate normal distributions and correlation analysis.

MATH C351 ***Concepts of Probability*** (3 credits)
Prerequisite: MATH C241. Axiomatic approach to probability, combinatorial probability, discrete and continuous random variables, geometric probability, expectation, conditional probability and conditional expectations, introduction to Markov chains and the Poisson process.

MATH C353 ***Stochastic Processes and Applications*** (3 credits)
Prerequisite: MATH C351. Continuous stochastic processes. Poisson processes, continuous-time Markov processes, queuing models, birth and death processes, renewal theory and reliability of systems.

MATH C362 ***Introduction to Analysis I*** (3 credits)
Prerequisite: MATH C261; MATH C281. Real-number system, cardinality, least upper bounds, limits, sequences, series, properties of continuous functions.

MATH C363 ***Introduction to Analysis II*** (3 credits)
Prerequisite: MATH C362. Riemann integration, fundamental theorem of calculus, sequences and series of functions, uniform convergence, functions of bounded variation; Riemann-Stieltjes integration.

MATH C366 ***Complex Analysis I*** (3 credits)
Prerequisite: MATH C261. Algebra and geometry of complex numbers, linear transformations, analytic functions, Laurent's series, calculus of residues, special functions.

MATH C371 ***Differential Equations II*** (3 credits)
Prerequisite: MATH C271. Numerical methods for ordinary differential equations, relation-to-existence theorem, solution-in-power series. Partial differential equations, separation of variables, Fourier series, diffusion equation, wave equation, Laplace's equation, Schrodinger's equation. Separation of variables leading to further applications of power-series method. Physical illustrations and problems.

MATH C373 ***Qualitative Theory of Differential Equations*** (3 credits)
Prerequisite: MATH C271. Systems of linear differential equations. Fundamental matrices. Nonhomogeneous linear systems. Non-linear systems. Solutions and trajectories. The phase plane. Stability concepts. Liapunov's second method. Periodic solutions and limit cycles. Introduction to Boundary-value problems and Sturm-Liouville theory.

MATH C381 ***Linear Algebra II*** (3 credits)
Prerequisite: MATH C281. Matrices, linear transformations, determinants, metric concepts, inner-product spaces, dual spaces, spectral theorem, bilinear and quadratic forms, canonical forms for linear transformations, matrix functions, selected topics.

MATH C382 ***Geometry*** (3 credits)
Prerequisite: MATH C261; MATH C281. An introduction to a number of geometries both from the historical point of view and in terms of groups of transformations. Particular topics may include Euclidean, projective, or hyperbolic geometry.

MATH C392 ***Elementary Number Theory*** (3 credits)
Prerequisite: 18 credits in post-Collegial Mathematics. Number systems, division and factorization, number-theoretic functions, congruences, algebraic congruences and primitive roots, quadratic residues, diophantine equations.

MATH C393 ***Algebraic Systems I*** (3 credits)
Prerequisite: 12 credits in post-Collegial Mathematics, or permission of the Department. Introduction to algebraic systems: groups, rings, fields, homomorphisms.

MATH C394 ***Algebraic Systems II*** (3 credits)
Prerequisite: MATH C393, or equivalent. Normal subgroups, quotient groups, iso-morphism theorems, polynomial rings, principal ideal rings, elementary field theory.

MATH C397 ***History of Mathematics*** (3 credits)
Prerequisite: MATH C261; MATH C281, or permission of the Department. Early mathematics, Greek

mathematics, European mathematics in the Middle Ages, the origin and development of analytic geometry and calculus, mathematics as free creation, the generality of mathematics in the twentieth century.

MATH 398 ***Selected Topics in Mathematics*** (3 credits)

MATH 399 ***Selected Topics in Mathematics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

MATH C400 ***Seminar on the Teaching of Mathematics*** (3 credits)
Prerequisite: Permission of the Department. This course is conducted in the form of a workshop and examines alternative methods of presentation of mathematical ideas at the secondary school level. It studies relevant aspects of the psychological development of the adolescent in the context of existing mathematics curricula.
NOTE: This course should be taken at the end of the programme and is available to practising teachers only.

MATH C401 ***Functions*** (6 credits)
Prerequisite: Permission of the Department. This course examines the topics in a traditional functions course: the concept of a function and its inverse. Linear and quadratic functions, rational functions, exponential, logarithmic, and trigonometric functions. Graphing is stressed. An historical overview is given. Methods of teaching these topics and of preparing secondary school students for a functions course are discussed.
NOTE: This course is available to practising teachers only.

MATH C402 ***Algebra I*** (3 credits)
Prerequisite: MATH C401 or equivalent previously or concurrently. Progressions, combinations, permutations, Bionomial Theorem, mathematical induction, inequalities, polynomials, cartesian and polar forms of complex numbers; conics.
NOTE: This course is available to practising teachers only.

MATH C403 ***Calculus I*** (3 credits)
Prerequisite: MATH C401, or equivalent. Functional notation, limits, and continuity. Differentiation of polynomials. The power, product, quotient, and chain rules. Implicit differentiation. Higher derivatives. Mean value theorem, Rolles theorem. Maxima and minima. Applications: tangents to plane curves, related rates. The differential, use in finding approximations. Indefinite and definite integrals, areas and volumes.
NOTE: This course is available to practising teachers only.

MATH C404 ***Geometry for Teachers*** (6 credits)
Prerequisite: MATH C401 or equivalent. Certain fundamentals of Cartesian, vector and transformation geometry. Distance preceiving motions in the plane, affine transformations with applications in Euclidean geometry. Projective transformations and applications to conics. Applications of these methods to topics presented as informal geometry in grades 7-10.
NOTE:This course is available to practising teachers only.

MATH C405 ***Calculus II*** (3 credits)
Prerequisite: MATH C403. Differentiation and integration of trigonometric functions. Derivatives of inverse trigonometric functions, logarithmic functions, and exponential functions. Methods of integration by parts, by substitution, by separation into partial fractions. Improper integrals, L'Hopital's Rule. Series: Convergence tests, Maclaurin and Taylor Theorems.
NOTE: This course is available to practising teachers only.

MATH C406 ***Algebra II*** (3 credits)
Prerequisite: MATH C401, or equivalent. Systems of equations, determinants, Cramer's rule. Matrices, operations on matrices, the inverse matrix. Gauss-Jordan method. Matrix transformations. Linear programming.
NOTE: This course is available to practising teachers only.

MATH C408 Geometry for Teachers (3 credits)
Prerequisite: MATH C401 or permission of the Department. Studies designed to meet more advanced mathematical and professional needs of students in the light of potential developments in the geometry curriculum at the junior secondary school level.
NOTE: This course is available to practising teachers only.

MATH C409 ***Computational Mathematics I*** (3 credits)
Prerequisite: Permission of the Department. Introduction to the microcomputer as a teaching and learning environment. Elements of programming. Editing and debugging. Flow charts and problem analysis. Applications to the teaching of arithmetic and algebra; simple data processing. Design of simple instructional sequences.
NOTE: This course is available to practising teachers only.

MATH C410 ***Curriculum Seminar*** (3 credits)
Prerequisite: Permission of the Department. Conducted in the form of a workshop. Examines

arithmetic, algebraic, and geometric aspects of the mathematics curricula, grades 7—11. Critical examination of various textbooks and pedagogic approaches used in the schools.
NOTE: This course is available to practising teachers only.

MATH C411 ***Probability and Statistics for Teachers*** (3 credits)
Prerequisite: MATH C401. Elementary probability, permutations and combinations, binomial and normal distribution. Analysis and organization of statistical data. Tests of hypotheses. Confidence limits. Introduction into linear regression and correlations. Lectures and laboratory.
NOTE: This course is available to practising teachers only. Students who have received credit for MATH C407 may not take this course for credit.

MATH C417 ***Diagnosis and Remediation*** (3 credits)
Prerequisite: Permission of the Department. Diagnosis and remediation in the light of current research in psychology and the learning of Mathematics.
NOTE: This course is available to practising teachers only.

MATH C419 ***Computational Mathematics II*** (3 credits)
Prerequisite: MATH C409 or permission of the Department. More advanced programming. Use of the microcomputer for problem solving and simulation. Applications to the teaching of algebra and functions. Uses of the computer in the school environment. Individual programming projects.
NOTE: This course is available to practising teachers only.

MATH C427 ***Life Contingencies II*** (3 credits)
Prerequisite: MATH C327. Life annuities; pure endowments, annual payments, continuous annuities, net annual premium, net level premium reserves; the expense factor; special topics.

MATH C428 ***Life Contingencies III*** (3 credits)
Prerequisite: MATH C427. Applications of Contingency Theory in areas of Life and Health Insurance, Annuities and Pension; individual risk theory, ruin theory.

MATH C429 ***Workshop in Actuarial Mathematics III*** (2 credits)
Prerequisite: MATH C311; MATH C329; MATH C336, or permission of the Department. This workshop will review, consolidate, and supplement the material from other courses in the programme for the Society's Examination 3. Students will be required to participate in the organization and presentation of material.

MATH C432 ***Theory of Graphs and Networks*** (3 credits)
Prerequisite: Permission of the Department. Directed and undirected graphs. Partitions, planar graphs, matrix representation, applications to network theory.

MATH C433 ***Calculus of Variations*** (3 credits)
Prerequisite: MATH C373. Nature of problems, Weak variations, the first variation, Euler's equation. The second variation, Jacobi's equation, Legendre's test, conjugate points. Relative maxima and minima, isoperimetrical problems. Integrals with variable end points. Applications to problems in pure and applied mathematics; the principle of least action. Strong variations, the Weierstrass E-function.

MATH C435 ***Advanced Numerical Analysis*** (3 credits)
Prerequisite: MATH C311; MATH C312. Advanced problems and techniques in numerical linear algebra, systems of non-linear equations, roots of polynomials, spline fitting, mini-max fitting, extrapolation techniques, solution of initial value ordinary differential equations, solution of two-point boundary value problems in ordinary differential equations, elliptic partial differential equations, finite difference and finite element methods for hyperbolic and parabolic partial differential equations.

MATH C436 ***Non-Linear Programming*** (3 credits)
Prerequisite: MATH C336 or permission of the Department. Classical methods of optimization, Lagrange multipliers, Kuhn-Tucker conditions; line search methods, quadratic programming, gradient methods. Introduction to dynamic programming.

MATH C437 ***Applied Stochastic Models in Operations Research*** (3 credits)
Prerequisite: MATH C337 or C351. Dynamic programming, renewal theory and applications, system reliability; simulation and Monte-Carlo technique; network analysis.

MATH C443 ***Time Series and Forecasting*** (3 credits)
Prerequisite: MATH C348. Time Series, forecasting by trend and irregular components (using multiple regression analysis and exponential smoothing); forecasting seasonal time series, addititive and multiplicative decomposition methods, Box-Jenkins methodology, moving average, auto-regressive and mixed models. Standard computer packages will be used.
NOTE: Students who have received credit for QUAN C447 may not take this course for credit.

MATH C445 ***Applied Statistics*** (3 credits)
Prerequisite: MATH C348; MATH C351 or permission of the Department. The course contents will be chosen from: sequential procedures; multivariate analysis; time series; reliability; advanced design of experiments; estimations and testing of hypothesis.

MATH C448 ***Analysis of Variance*** (3 credits)
Prerequisite: MATH C348. Single and multiple factor analysis of variance (ANOVA); fixed, random and mixed effects models; multiple comparison; determination of sample size; nonparametric procedures.

MATH C451 ***Advanced Probability*** (3 credits)
Prerequisite: MATH C351. Markov Chains, occupancy and matching problems, characteristic functions and moment-generating functions, central limit theorem and weak law of large numbers, probability generating functions and applications to combinatorial problems, random walk and the reflection principle, branching processes.

MATH C454 ***Mathematical Statistics*** (3 credits)
Prerequisite: MATH C351. Multivariate distributions, derivation of distributions using transformation method; standard sampling distributions, order statistics, descriptive and inferential statistics; estimation, properties of estimators, Rao-Cramer Inequality, Rao-Blackwell Theorem; maximum likelihood and method of moments estimators; tests of hypotheses, Neyman-Pearson Theory, likelihood ratio tests and their properties.

MATH C464 ***Real Analysis*** (3 credits)
Prerequisite: MATH C363. Metric spaces; function spaces; compactness, completedness, fixed-point theorems, Ascoli-Arzela theorem, Weierstrass approximation theorem.

MATH C466 ***Complex Analysis II*** (3 credits)
Prerequisite: MATH C363; MATH C366. Cauchy's theorem, singularities, maximum modulus principle, uniqueness theorem, normal families, Riemann mapping theorem.

MATH C467 ***Measure and Integration*** (3 credits)
Prerequisite: MATH C464. Lebesque measure and integration on the real line, convergence theorems, absolute continuity, completeness of $L^2(0,1)$.

MATH C471 ***Partial Differential Equations*** (3 credits)
Prerequisite: MATH C371 or MATH C373. Classification of partial differential equations, the Cauchy-Kowalewski theorem, characteristics, boundary value and eigenvalue problems for elliptic equations, initial value and initial boundary value problems for parabolic and hyperbolic equations.

MATH C472 ***Linear Systems*** (3 credits)
Prerequisite: MATH C281; MATH C371, or MATH C373. State-space analysis and design of continuous and discrete systems. Controllability and observability, modal control, pole-displacement techniques. Luenberger observers, Liapunov stability.

MATH C473 ***Stability Theory of Differential Equations*** (3 credits)
Prerequisite: MATH C373. Existence and uniqueness of solutions of nonlinear differential equations. Properties of solutions. Linear systems. Asymptotic behaviour of linear systems. Stability in nonlinear systems. Linearization. Liapunov functions. Two dimensional systems. Limit cycles.

MATH C474 ***Introduction to Mathematical Control Theory*** (3 credits)
Prerequisite: MATH C363; MATH C472. Linear control systems. Attainable sets; compactness, convexity, continuity in time. Controllability and observability. Time optimal control. Maximum principle. Examples of physical systems. Switching curves. Optimal control with quadratic cost.

MATH C475 ***Topology*** (3 credits)
Prerequisite: MATH C362, or equivalent. An introduction to fundamental ideas in topology. Topics will be chosen from general topology and combinational or algebraic topology. These may include compactness and connectedness, topological equivalence, winding number of a curve, Euler characteristic and classification of surfaces.

MATH C491 ***Abstract Algebra I*** (3 credits)
Prerequisite: MATH C394, or equivalent. Sylow theorems, composition series, ideal theory of rings, noetherian rings, modules.

MATH C492 ***Abstract Algebra II*** (3 credits)
Prerequisite: MATH C491, or equivalent. Elements of field and Galois theory, including ruler-and-compass construction and the unsolvability of equations of fifth degree.

MATH C496 ***Mathematical Thinking*** (3 credits)
Prerequisite: Permission of the Department. This course is intended to stimulate the student's mathematical creativity and to improve his ability to think systematically, analyze problems, and communicate his reasoning. Students participate actively in discussing and solving problems drawn from a variety of sources (including previous Putnam competitions) and are expected to explain their thinking both orally and in writing. Discussions include the following topics: problem posing, Polya's techniques of problem solving; equivalence and similarity of problems; generalization; applications. The problems are selected from: combinatorics, geometry, group theory, number theory, real analysis, etc.
NOTE: Students who have received credits for MATH C499 may not take this course for credit.

MATH 498 ***Advanced Topics in Mathematics*** (3 credits)

MATH 499 ***Advanced Topics in Mathematics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.210 Modern Languages and Linguistics

Chairman
H. FAMIRA, *Associate Professor of German*

Professors
F. ANTOLIN *(Spanish)*
C. FONDA *(Linguistics)*

Associate Professors
C.R. BARTON *(Classics and Linguistics)*
A. COSTANZO *(Italian)*
J.D. GRAYSON *(Spanish and Linguistics)*
A.M. KETTER *(German)*
J.A. MACALUSO *(Spanish and Italian, Supervisor of Hebrew)*
H. SCHEER *(German and Linguistics)*
A.T. SIDOROW *(Russian)*

Assistant Professors
I.G. EHMER *(German)*
F. SALVATORE *(Italian)*

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours in German

54 GERM courses; GERM C250 or higher, chosen in consultation with the Department

6 LING courses, chosen in consultation with the Department

60 BA Honours in Italian or Spanish

A student entering any of these programmes with no previous knowledge in the field would take the following sequence of courses in Italian or Spanish. Students must consult with the Department prior to selecting their courses.

Stage I

18 ITAL or SPAN C210[6], C220[6], C235[6]

Stage II

12 ITAL or SPAN C250[6], C255[6]

6 LING C200[6]

Stage III

12 ITAL or SPAN C300[6], C305[6]

12 credits (in the language studied) at the 400 level in a sequence approved by the Department. Certain 300-level courses may be substituted with prior approval of the Department.

NOTE: Students in the Honours in Italian programme may register for HIST C346[6]: History of Modern Italy, with permission of the Department.

For students with previous knowledge in the field, the programme will be established in consultation with the Department.

36 BA Major in German

36 GERM courses; GERM C250 or higher, chosen in consultation with the Department

42 BA Major in Italian or Spanish

A student entering any of these programmes with no previous knowledge in the field would take the following sequence of courses in Italian or Spanish. Students must consult with the Department prior to selecting their courses.

Stage I

12 Chosen from ITAL or SPAN C210[6], C220[6], C235[6]

Stage II

12 ITAL or SPAN C250[6], C255[6]

Stage III

18 credits (in the language studied) at the 300 level or higher in a sequence approved by the Department.

For students with previous knowledge in the field, the programme will be established in consultation with the Department.

24 Minor in German

24 GERM courses; GERM C250 or higher, chosen in consultation with the Department

30 Minor in Hebrew, Italian, or Spanish

A student entering any of these programmes with no previous knowledge in the field would take the following sequence of courses in Hebrew, Italian, or Spanish. Students must consult with the Department prior to selecting their courses.

Stage I

12 Chosen from HEBR* (or ITAL or SPAN) C210[6], C220[6], C235[6]

**Students in Hebrew must select 6 credits in consultation with the Department.*

Stage II

12 HEBR* (or ITAL or SPAN) C250[6] and C255[6]

**Students in Hebrew must select 6 credits in consultation with the Department.*

Stage III

6 credits (in the language studied) at the 300 level or higher in a sequence approved by the Department.

For students with previous knowledge in the field, the programme will be established in consultation with the Department.

30 Minor in Russian

Students following a programme in Russian must establish the course sequence in consultation with the Department.

30 RUSS credits chosen with prior approval of the Department.

LINGUISTICS

The Department offers an Honours, a Major, and a Minor programme in Linguistics.

60 BA Honours in Linguistics

A student entering an Honours programme in Linguistics will normally take the following courses:

6 LING C200[6]
6 LING C410[3], C411[3]
12 LING C320[3], C321[3], C372[3], C373[3]
12 LING credits chosen at the '300' level
6 Chosen from LING C421[6], C431[6]
6 LING credits chosen at the '400' level
12 credits in Linguistics or 12 credits chosen in consultation with the Department in one of the following: Latin, Greek, Hebrew, Russian, German, Spanish, Italian, French, English, Sociology, Philosophy, Psychology, Arabic, Portuguese

42 BA Major in Linguistics

6 LING C200[6]
12 LING C372[3], C373[3], C410[3], C411[3]
18 LING credits chosen at the '300' and '400' level, in consultation with the Department
6 Elective LING or 6 credits chosen in consultation with the Department

30 BA Minor in Linguistics

6 LING C200[6]
24 credits in Linguistics

Students who already had Honours status by June 1, 1977, will continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

NOTE: "A/B" and "B" 200-level courses. The second-term content of 6-credit language courses designated "A/B" is identical to that of 3-credit courses, with the same title, labelled "B". The "A/B" courses are designed to permit less advanced students to reach the level of students taking only the "B" course. Students in "A/B" courses may not withdraw after completing the fall term and receive credit.

Written work may be required in the language being studied for these courses; please consult with the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

Arabic

ARAB C451 ***Literary Arabic*** (6 credits)
Prerequisite: LING C200, or permission of the Department. This course is designed to give the student in one year a thorough understanding of modern literary Arabic through linguistic analysis of its structure.

German

GERM C210 ***Introductory Course in German A/B*** (6 credits)
A beginners' course in the German language, designed to make the student conversant with the grammar, pronunciation, and ordinary vocabulary. Equal emphasis placed on speaking and understanding, reading and writing. Can be taken concurrently with GERM C220 and/or GERM C235. Lectures and laboratory.

GERM C211 ***Introductory Course in German B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of GERM C210. It is designed for students who have taken some German at the CEGEP level, or equivalent. Can be taken concurrently with GERM C221 and/or GERM C235. Lectures and laboratory.

GERM C220 ***Introduction to German Studies A/B*** (6 credits)
An introductory language course, which develops all basic skills. Emphasis on the audio-lingual approach; i.e., on speaking and understanding. May be taken concurrently with GERM C210 and/or GERM C235. Lectures and laboratory.

GERM C221 ***Introduction to German Studies B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of GERM C220. It is designed for students who have taken some German at the CEGEP level, or equivalent. Can be taken concurrently with GERM C211 and/or GERM C235. Lectures and laboratory.

GERM C235 ***Translation I*** (6 credits)
This course will give the student sufficient training to read German and to translate from German into English with reasonable competence. No previous knowledge of German required. Texts will include a variety of reading materials of current interest.
NOTE: This course alone may not be used as a prerequisite for advanced courses in German.

GERM C250 ***Intermediate German A/B*** (6 credits)
Prerequisite: GERM C210 or GERM C220, or equivalent. Advanced instruction in the language. Emphasis upon idiom, and usage in conversation and composition. Readings from German authors and other texts. Lectures and laboratory.

GERM C251 ***Intermediate German B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of GERM C250. It is designed for students who have taken at least four semesters of German at the CEGEP level or equivalent. May be taken concurrently with GERM C255.
NOTE: Students who have credit for GERM C250 may not take this course for credit.

GERM C255 ***Translation II*** (6 credits)
Prerequisite: GERM C210 or GERM C220, or equivalent. This course is a continuation of Translation I and presents more complicated problems of translation from German into English. It is also an introduction to the basic skills required to translate English into German.

GERM C260 ***German Culture*** (6 credits)
Prerequisite: GERM C210 or equivalent or permission of the Department. This is a course designed to develop the speaking ability of the student. The topic of the course is an introduction into the cultural heritage of the German-speaking people.

GERM 298 ***Selected Topics in German*** (3 credits)

GERM 299 ***Selected Topics in German*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

GERM C300 ***Advanced Composition and Stylistics*** (6 credits)
Prerequisite: GERM C250 or GERM C255, or equivalent. This course is intended to give the student increased fluency in and a firmer command of the language. The emphasis of the course is on stylistics and composition.

GERM C305 ***Translation III*** (6 credits)
Prerequisite: GERM C255, or equivalent. This course is a continuation of Translation II and deals with advanced problems and techniques of translating from English into German.

GERM C345 ***(Also given as HIST C345) Germany and Austria in Modern Times*** (6 credits)
Socio-economic change and the development of nation-states in German Central Europe from the eighteenth century to the present. For advance reading, the student might refer to *H. Holborn, A History of Modern Germany*.

GERM C360 ***German Civilization*** (6 credits)
Prerequisite: GERM C250 or GERM C255 or equivalent. This course is designed to acquaint the student with the intellectual and cultural history of German-speaking nations as reflected in their writers.

GERM 398 ***Selected Topics in German*** (3 credits)

GERM 399 ***Selected Topics in German*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ALL COURSES WITH NUMBERS 400 AND HIGHER ARE CONDUCTED IN GERMAN

GERM C400 ***Survey of German Literature 800 to 1600*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. A survey of Old High German, Middle High German, and Early New High German literature.

GERM C405 ***German Literature from 1600 to 1750*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. A detailed study of representative writers of the German Baroque, Rococo, and Enlightenment periods.

GERM C410 ***Literature of the Classic Period*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. Pre-classic and classic German literature, with its philosophical background.

GERM C415 ***Literature of the Romantic Period*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. Romanticism as a universal attitude. The works of the major German Romanticists and their influence.

GERM C420 ***German Literature of the Nineteenth Century*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. A study of representative works of post-romantic authors and the writers of German Realism.

GERM C425 ***German Literature from 1880 to 1930*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. The development of German literature from Naturalism to the beginnings of Hitler-Germany.

GERM C430 ***Contemporary German Literature*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. Literature in Hitler-Germany, German emigrant literature, and post-war literature.

GERM C435 ***History of the German Drama*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. A study of German drama from its beginnings to modern times.

GERM C440 ***A Study of the Deutsche Novelle*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. A study of the Deutsche Novelle from Goethe to Kafka.

GERM C450 ***German Poetry from the Middle Ages to Modern Times*** (3 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. A survey of German poetry through the centuries. Outstanding examples of representative poets will be studied in detail.

GERM C465 ***History of the German Language*** (6 credits)
Prerequisite: GERM C250 or equivalent, or permission of the Department. The development of the language up to Old High German will be sketched in rough outlines. On the basis of literary works, the development from Old High German to Middle High German, Early New High German and our Standard German will be studied.
NOTE: This course may be taken for credit in a Linguistics programme.

GERM C480 ***Tutorial I*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in German language and/or literature, and at least two major assignments to meet the student's individual needs.

GERM C481 ***Tutorial II*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in German language and/or literature. Written and oral criticism of the works studied.

GERM C482 ***Tutorial III*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in German language and/or literature, and at least two major assignments to meet the student's individual needs.
NOTE: Students who have received credit for GERM C480 may register for GERM C482, provided the subject matter is different.

GERM C483 ***Tutorial IV*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in German language and/or literature. Written and oral criticism of the works studied.
NOTE: Students who have received credit for GERM C481 may register for GERM C483, provided the subject matter is different.

GERM 498 ***Advanced Topics in German*** (3 credits)

GERM 499 ***Advanced Topics in German*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

Hebrew

HEBR C210 ***Introductory Course in Hebrew A/B*** (6 credits)
A beginners' course in Hebrew, spoken and written, with reading of classical and modern texts. Lectures and laboratory.
NOTE: Students who have credits for CEGEP Hebrew 301 or 401, or whose schooling has been conducted in Hebrew, will not be admitted to this course.

HEBR C211 ***Introductory Course in Hebrew B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of HEBR C210. It is designed for students who have taken some Hebrew at the CEGEP level or equivalent.

HEBR C250 ***Intermediate Hebrew A/B*** (6 credits)
Prerequisite: HEBR C210, or two to three years of high school Hebrew or equivalent. This course consists of a complete review of Hebrew grammar and syntax, with special emphasis on modern Hebrew usage, readings in the Bible, and an introduction to modern Hebrew literature. Can be taken concurrently with HEBR C300. Lectures and laboratory.

HEBR C251 ***Intermediate Hebrew B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of HEBR C250. It is designed for students who have taken two to three years of high school Hebrew or equivalent. Lectures and laboratory.
NOTE: Students who have received credit for HEBR C250 may not take this course for credit.

HEBR C300 ***An Introduction to Biblical Hebrew*** (6 credits)
Prerequisite: HEBR C210 or equivalent. A study of classical Hebrew grammar. This course will give

the student sufficient training to read, with reasonable competence, classical Hebrew texts, as well as the Hebrew Bible. Can be taken concurrently with HEBR C250. This course is designed especially for students in the Departments of Theological Studies and Religion.

ALL COURSES WITH NUMBERS 400 AND HIGHER ARE CONDUCTED IN HEBREW

HEBR C400 ***Literature from the Talmudic Period to the Haskalah*** (6 credits)
Prerequisite: HEBR C250 or equivalent. Hebrew literature from Talmudic times to the Enlightenment.

HEBR C410 ***Medieval Literature (The Golden Age)*** (6 credits)
Prerequisite: HEBR C400 or HEBR C420, or equivalent. The literature of the Hebrew Golden Age. Outstanding examples of representative writers will be studied in detail.

HEBR C420 ***Modern Hebrew Literature*** (6 credits)
Prerequisite: HEBR C250 or equivalent. A detailed study of representative writers from the eighteenth century to the establishment of the State of Israel.

HEBR C430 ***Contemporary Israeli Literature*** (6 credits)
Prerequisite: HEBR C250 or equivalent. A study of contemporary Israeli prose and poetry.

HEBR C480 ***Tutorial I*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Written and oral criticism of the works studied.

HEBR C481 ***Tutorial II*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Written and oral criticism of the works studied.
NOTE: Students who have received credit for HEBR C480 may register for HEBR C481 providing the subject matter is different.

HEBR C482 ***Tutorial III*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Written and oral criticism of the works studied.
NOTE: Students who have received credit for HEBR C480 may register for HEBR C482, provided the subject matter is different.

HEBR C483 ***Tutorial IV*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Written and oral criticism of the works studied.
NOTE: Students who have received credit for HEBR C481 may register for HEBR C483, provided the subject matter is different.

Italian

ITAL C210 ***Introductory Course in Italian A/B*** (6 credits)
A beginners' course in the Italian language, designed to make the student conversant with the grammar, pronunciation, and ordinary vocabulary. Equal emphasis is placed on speaking and understanding, reading and writing. May be taken concurrently with ITAL C220. Lectures and laboratory.

ITAL C211 ***Introductory Course in Italian B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of ITAL C210. It is designed for students who have taken some Italian at the CEGEP level, or equivalent. May be taken concurrently with ITAL C221. Lectures and laboratory.

ITAL C220 ***Introduction to Italian Studies A/B*** (6 credits)
An introductory language course that develops all basic skills. Audio-visual and audio-lingual techniques are emphasized. May be taken concurrently with ITAL C210. Lectures and laboratory.

ITAL C221 ***Introduction to Italian Studies B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of ITAL C220. It is designed for students who have taken some Italian at the CEGEP level or equivalent. May be taken concurrently with ITAL C211. Lectures and laboratory.

ITAL C235 ***Translation I*** (6 credits)
This course will give the student sufficient training to read Italian and to translate from Italian into English with reasonable competence. No previous knowledge of Italian is required. Texts will include a variety of reading material of current interest.
NOTE: This course alone may not be used as a prerequisite to advanced courses in Italian.

ITAL C250 ***Intermediate Italian A/B*** (6 credits)
Prerequisite: ITAL C210 or ITAL C220, or equivalent. Advanced instruction in the language. Emphasis upon idiom and usage in conversation and composition. Readings from Italian authors and other texts. Lectures and laboratory.

ITAL C251 ***Intermediate Italian B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of ITAL C250. It is designed for students who have taken at least four semesters of Italian at the CEGEP level or equivalent.
NOTE: Students who have credit for ITAL C250 may not take this course for credit.

ITAL C255 ***Translation II*** (6 credits)
Prerequisite: ITAL C210 or ITAL C220, or equivalent. This course presents problems of translation from Italian into English and from English into Italian.

ITAL C270 ***Italian for Commerce and Administration*** (3 credits)
Prerequisite: ITAL C210 or equivalent. This course is intended for students in Commerce and in Business Administration. Emphasis on Commerce terminology and the language of business.

ITAL 298 ***Selected Topics in Italian*** (3 credits)

ITAL 299 ***Selected Topics in Italian*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ITAL C300 ***Advanced Composition and Stylistics*** (6 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. This course is intended to give the student increased fluency in and a firmer command of the language. The emphasis of the course is on stylistics and composition.

ITAL C305 ***Translation III*** (6 credits)
Prerequisite: ITAL C255 or equivalent. This course is a continuation of Translation II and deals with advanced problems and techniques of translation from Italian into English and from English into Italian.

ITAL C350 ***Literature in Translation*** (6 credits)
A study of representative works of Italian literature. All readings and lectures will be in English.

ITAL C360 ***Italian Civilization*** (6 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A survey of Italy's cultural and scientific achievements. Attention will be given to Italy's social, political, and economic life.

ITAL 398 ***Selected Topics in Italian*** (3 credits)

ITAL 399 ***Selected Topics in Italian*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ALL COURSES NUMBERED 400 AND HIGHER ARE CONDUCTED IN ITALIAN.

ITAL C400 ***Italian Literature to 1600*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A survey of Italian literature of the Middle Ages and Renaissance. Lectures: 3 hours per week.

ITAL C401 ***Italian Literature after 1600*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A survey of literary and cultural trends from 1600 to the present. Lectures: 3 hours per week.

ITAL C405 ***Italian Theatre to 1800*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. Origin and evolution of the Italian theatre. Emphasis on Goldoni and the *Commedia dell'arte;* Alfieri and tragedy. Lectures: 3 hours per week.

ITAL C406 ***Modern Italian Theatre*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of representative theatrical works of the nineteenth and twentieth centuries. Particular attention will be given to the innovative theatre of Pirandello. Lectures: 3 hours per week.

ITAL C410 ***Literary Criticism*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A survey of literary criticism from the Renaissance to the present. Readings from the critical works of Vico, Foscolo and De Sanctis, Croce. Critical theories and trends of modern Italian criticism. Lectures: 3 hours per week.

ITAL C415 ***Dante*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of Dante's minor works. Introduction to the *Divina commedia*. Lectures: 3 hours per week.

ITAL C416 ***"Divina commedia"*** (3 credits)
Prerequisite: ITAL C415 or permission of the Department. Analysis of the *Divina commedia*. Lectures: 3 hours per week.

ITAL C420 ***Petrarch and Early Italian Poetry*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of poetic works from the poets of the *Scuola siciliana* and the *Dolce stil nuovo*. Emphasis on Petrarch's *Canzoniere*. Lectures: 3 hours per week.

ITAL C421 ***Boccaccio and the Novella*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. Origin and evolution of the early Italian novella. Emphasis on the *Decameron*. Lectures: 3 hours per week.

ITAL C425 ***Fifteenth-Century Prose and Poetry*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. The rise of Humanism in Italy. A study of representative prose writings of fifteenth-century authors, and a study of the epic and lyric poetry of the fifteenth century: chivalresque poetry in Italy, the lyric poetry of Poliziano and Lorenzo de' Medici. Lectures: 3 hours per week.

ITAL C430 ***The Italian Renaissance*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of the Italian Renaissance, with emphasis on Machiavelli's *Principe* and *La mandragola*. Lectures: 3 hours per week.

ITAL C431 ***Ariosto and Tasso*** (3 credits)
Prerequisite: Italian C250 or ITAL C255, or equivalent. A study of *Orlando Furioso* and *La Gerusalemme liberata*. Lectures: 3 hours per week.

ITAL C435 ***Seventeenth- and Eighteenth-Century Prose*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of representative scientific, philosophic, and literary texts. Emphasis on Galileo, Vico, Goldoni, and Alfieri. Lectures: 3 hours per week.

ITAL C436 ***Seventeenth- and Eighteenth-Century Poetry*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of representative poetry of the Baroque and the Enlightenment. Emphasis on Marino, Parini, and Alfieri. Lectures: 3 hours per week.

ITAL C440 ***Nineteenth-Century Novel*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of different approaches to the novel by Italian writers of the nineteenth century. Emphasis on Manzoni and Verga. Lectures: 3 hours per week.

ITAL C441 ***Nineteenth-Century Poetry*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. Romanticism in Italy. A study of the major poetic works of Foscolo, Manzoni, and Leopardi. Lectures: 3 hours per week.

ITAL C445 ***Twentieth-Century Novel*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of representative novelistic works of this century. Lectures: 3 hours per week.

ITAL C446 ***Modern Italian Poetry*** (3 credits)
Prerequisite: ITAL C250 or ITAL C255, or equivalent. A study of the principal literary trends in modern Italian poetry. Lectures: 3 hours per week.

ITAL C480 ***Tutorial I*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Guided readings in Italian language and/or literature. Written and oral criticism of the works studied.

ITAL C481 ***Tutorial II*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Guided readings in Italian language and/or literature. Written and oral criticism of the works studied.

ITAL C482 ***Tutorial III*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Guided readings in Italian language and/or literature. Written and oral criticism of the works studied.
NOTE: Students who have received credit for ITAL C480 may register for ITAL C482, provided the subject matter is different.

ITAL C483 ***Tutorial IV*** (3 credits)
Prerequisite: Permission of the Department. A course designed to meet the individual needs of advanced students. Guided readings in Italian language and/or literature. Written and oral criticism of the works studied.
NOTE: Students who have received credit for ITAL C481 may register for ITAL C483, provided the subject matter is different.

ITAL 498 ***Advanced Topics in Italian*** (3 credits)

ITAL 499 ***Advanced Topics in Italian*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

Linguistics

LING C200 ***Introduction to Linguistics*** (6 credits)
Introduction to the principles of general linguistics. Basic phonetics and phonemics. Emphasis on synchronic linguistic analysis, with a brief introduction to historical and comparative linguistics.

LING 298 ***Selected Topics in Linguistics*** (3 credits)

LING 299 ***Selected Topics in Linguistics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

LING C300 ***Sociolinguistics I*** (3 credits)
The interaction of linguistic and social structures. Regional and social linguistic variations. Social variables. Linguistic variations and linguistic theory. Attitudes towards linguistics variety and educational policies. The social psychology of language choice. Language problems and literacy. Users and uses of language. Social processes in linguistic structure. Lectures: 3 hours per week.

LING C301 ***Sociolinguistics II*** (3 credits)
Prerequisite: LING C300, or permission of the Department. Directions in sociolinguistics. The Whorf-Sapir hypothesis. Conceptual categories in primitive communities. Ethnography or cognitive systems. American-Indian grammatical categories. Lectures: 3 hours per week.

LING C310 ***Historical and Comparative Linguistics I*** (3 credits)
Prerequisite: LING C200, or permission of the Department. The nature of language. Traditional, historical, structural, transformational grammars. Structural variations in language.
NOTE: Students who have received credit for LING C210 may not take this course for credit.

LING C311 ***Historical and Comparative Linguistics II*** (3 credits)
Prerequisite: LING C310, or permission of the Department. The comparative method. Application of the comparative method. Reconstruction of protoforms. Reconstruction of words and meanings. The method of internal reconstruction and its applications.
NOTE: Students who have received credit for LING C211 may not take this course for credit.

LING C320 ***Semantics I*** (3 credits)
Prerequisite: LING C200 or equivalent, or permission of the Department. Linguistic history of semantics. The emotive elements in name and sense. Central and contextual meaning, feeling, tone. Synonymy, homonymy, polysemy. Synchronic and diachronic semantics. Lectures: 3 hours per week.

LING C321 ***Semantics II*** (3 credits)
Prerequisite: LING C320, or permission of the Department. Theory of change. (Meillet, Wundt, Gustaf Sterne, Hans Sperber, Briel, Sturtevant). Classifications of changes of meaning: genetic, causal, functional. Changes of model and changes of syntax. The Port Royal grammarians. Synesthesia and pseudosynesthesia. Panchronistic statistical laws. Lectures: 3 hours per week.

LING C330 ***Anthropological Linguistics I*** (3 credits)
Prerequisite: LING C200, or equivalent. Theories about the development of language in mankind and individuals. The characteristics of human language as opposed to animal languages and other communication systems. Similarity and diversity among languages. Lectures: 3 hours per week.

LING C331 ***Anthropological Linguistics II*** (3 credits)
Prerequisite: LING C330, or permission of the Department. Speech surrogates and paralanguage. Language and thought in primitive communities. Swadesh, Sapir, Whorf's theories on some American-Indian languages. Linguistic change and reconstruction. Lectures: 3 hours per week.

LING C360 ***Language and Thought I*** (3 credits)
Prerequisite: LING C200, or equivalent. Meaning and the structure of languages. Grammar, competence, and performance. Language and perception. Universals in linguistic theory. Lectures: 3 hours per week.

LING C361 ***Language and Thought II*** (3 credits)
Prerequisite: LING C360, or permission of the Department. Cognition and the development of language. The cognitive basis of language learning in infants. Linguistic relativism. The structure of the psychological lexicon. Psychological models of bilingualism. Computer and linguistic processes. Lectures: 3 hours per week.

LING C372 ***Descriptive and Instrumental Phonetics*** (3 credits)
Prerequisite: LING C200, or permission of the Department. Description of speech sounds in articulatory terms. Identification and description of sounds which occur outside the Indo-European family of languages. Description of speech sounds as to their acoustic qualities: frequency, amplitude, pitch, stress. Interpretation of sound spectrograms.
NOTE: Students who have received credit for LING C370 and C371 may not take this course for credit.

LING C373 ***Phonemic Analysis*** (3 credits)
Prerequisite: LING C200 and/or LING C372, or permission of the Department. The fundamentals of distinctive feature analysis as developed by Jakobsen, Chomsky, and Halle. Theoretical concepts and notational techniques will be emphasized. Extensive training in data analysis and rule writing. *NOTE: Students who have received credit for LING C417 may not take this course for credit.*

LING 398 ***Selected Topics in Linguistics*** (3 credits)

LING 399 ***Selected Topics in Linguistics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

LING C410 ***Theory of Morphology and Syntax I*** (3 credits)
Prerequisite: LING C200, or equivalent. Traditional grammar and syntax. Structuralist grammar and syntax. Lectures: 3 hours per week.

LING C411 ***Theory of Morphology and Syntax II*** (3 credits)
Prerequisite: LING C410, or permission of the Department. The theory of generative grammar. Phrase structure rules and specific transformational rules. Metatheoretical constraints. Theories of syntactic structures. Lectures: 3 hours per week.

LING C421 ***Non-Indo-European Structures*** (6 credits)
Prerequisite: LING C200 either previously or concurrently, or permission of the Department. This course is intended to give the student an acquaintance in depth with the structures of several languages differing markedly in their nature from Indo-European. Possible areas of study might be Eskimo, Finnish, Japanese, Swahili, Turkish, some Amerindian or Malayo-Polynesian language, etc. As a general rule, only four languages are investigated in a particular year.

LING C431 ***Comparative Indo-European Linguistics*** (6 credits)
Prerequisite: LING C200, or permission of the Department. Through a comparative study of the phonology of the various branches of the Indo-European language family (Indo-Iranian, Hellenic, Italic, Germanic, Slavic, Baltic, etc.), this course will familiarize the student with the techniques used in linguistic reconstruction. Emphasis will be given to the development and differentiation of languages through time.

LING 498 ***Advanced Topics in Linguistics*** (3 credits)

LING 499 ***Advanced Topics in Linguistics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

Modern Languages

The following courses give instruction in language and cultures not normally covered by the Department. Any or all of them may be offered when a specific ethnic community has persuaded the University of its interest in seeing them put on, and of its willingness to support them.

MODL 298 ***Special Topics in Modern Languages*** (3 credits)

MODL 299 ***Special Topics in Modern Languages*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

MODL 398 ***Special Topics in Modern Languages*** (3 credits)

MODL 399 ***Special Topics in Modern Languages*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

MODL 498 ***Advanced Topics in Modern Languages*** (3 credits)

MODL 499 ***Advanced Topics in Modern Languages*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

Portuguese

PORT C400 ***Portuguese Language and Literature*** (6 credits)
Prerequisite: SPAN C235; SPAN C255 or equivalent, and any 6 credits at the 400 level in Spanish. A course designed for advanced Spanish language students. Readings in Portuguese begin as early as the second week of class.

Russian

RUSS C210 ***Introductory Course in Russian A/B*** (6 credits)
A beginners' course in the Russian language, designed to acquaint the student in one year with pronunciation, the main grammatical aspects, and a basic vocabulary. Emphasis is placed on speaking, reading, and writing Russian. Must be taken concurrently with RUSS C220. Lectures and laboratory.

RUSS C211 ***Introductory Course in Russian B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of RUSS C210. It is designed for students who have taken some Russian at the CEGEP level or equivalent. Must be taken concurrently with RUSS C210. Lectures and laboratory.

RUSS C220 ***Introduction to Russian Studies A/B*** (6 credits)
An introductory language course that develops all basic skills. Emphasis on the audio-lingual approach; i.e., on speaking and understanding. Must be taken concurrently with RUSS C210. Lectures and laboratory.

RUSS C221 ***Introduction to Russian Studies B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of RUSS C220. It is designed for students who have taken some Russian at the CEGEP level or equivalent. Must be taken concurrently with RUSS C211. Lectures and laboratory.

RUSS C235 ***Composition and Translation I*** (6 credits)
This course will give the student sufficient training to read Russian and to translate from Russian into English with reasonable competence. No previous knowledge of Russian required. Texts will include a variety of reading material of current interest.
NOTE: This course alone may not be used as a prerequisite for advanced courses in Russian.

RUSS C250 ***Intermediate Russian A/B*** (6 credits)
Prerequisite: RUSS C210 or RUSS C220, or equivalent. A complete review of grammar, and practice in composition, reading, and conversation. Through reading of short stories and additional material, the student is given the opportunity to gain acquaintance with Russian culture and literature. Lectures and laboratory.

RUSS C251 ***Intermediate Russian B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of RUSS C250. It is designed for students who have taken at least four semesters of Russian at the CEGEP level or equivalent. May be taken concurrently with RUSS C255.
NOTE: Students who have received credit for RUSS C250 may not take this course for credit.

RUSS C255 ***Composition and Translation II*** (6 credits)
Prerequisite: RUSS C210 or RUSS C220, or equivalent. This course is a continuation of Composition and Translation I, and presents more complicated problems of translation from Russian into English. It is also an introduction to the basic skills of translating English into Russian.

RUSS C300 ***Advanced Composition and Stylistics*** (6 credits)
Prerequisite: RUSS C250 or equivalent. This course is intended to give the student increased fluency in and a firmer command of the language. The emphasis of the course is on stylistics and composition. Lectures.

RUSS C305 ***Composition and Translation III*** (6 credits)
Prerequisite: RUSS C255 or equivalent. This course is a continuation of Composition and Translation II and deals with advanced problems and techniques of translation from Russian and into Russian.

RUSS C350 ***Literature in Translation*** (6 credits)
A study of representative works of Russian literature. All readings and lectures will be in English.

ALL COURSES WITH NUMBERS 400 AND HIGHER ARE CONDUCTED IN RUSSIAN.

RUSS C420 ***Introduction to Nineteenth-Century Russian Literature through the Short Story*** (6 credits)
Prerequisite: RUSS C250 or equivalent. The short story will be used both as a subject for literary study and as a reflection of the history and social preoccupation of the period. Opportunity will be provided for discussion. Some attention will be paid to composition.

RUSS C430 ***Soviet Literature*** (6 credits)
Prerequisite: RUSS C250 or equivalent. A general survey of Soviet prose, drama, and poetry from 1917 to the present day. The aim of the course is to familiarize the student not only with the literature itself but also with its origins and development. Opportunity will be provided for discussions. Some time will be devoted to advanced composition.

RUSS C435 ***Russian Drama*** (6 credits)
Prerequisite: RUSS C250 or equivalent. The course traces the development of Russian drama from the end of the eighteenth century to the present day.

RUSS C470 ***Study of an Individual Russian Author I*** (3 credits)
Prerequisite: RUSS C250 or equivalent. This course will consist of the detailed study of a Russian author.

RUSS C471 ***Study of an Individual Russian Author II*** (3 credits)
Prerequisite: RUSS C250 or equivalent. This course will consist of the detailed study of a Russian author.

RUSS C480 ***Tutorial I*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in Russian literature and/or language, with at least two major assignments to meet the student's individual needs.

RUSS C481 ***Tutorial II*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in Russian literature and/or language, with at least two major assignments to meet the student's individual needs.
NOTE: Students who have received credit for RUSS C480 may register for RUSS C481 provided the subject matter is different.

Spanish

SPAN C210 ***Introductory Course in Spanish A/B*** (6 credits)
A comprehensive and thorough introductory language course for the student with little or no knowledge of Spanish. Practice is given in reading, writing, and conversation, with particular emphasis placed on oral work. In the second term, classes are conducted, as far as possible, in Spanish. It may be taken concurrently with SPAN C220 and/or SPAN C235. Lectures and laboratory.

SPAN C211 ***Introductory Course in Spanish B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of SPAN C210. It is designed for students who have taken some Spanish at the CEGEP level or equivalent. May be taken concurrently with SPAN C221. Lectures and Laboratory.

SPAN C220 ***Introduction to Spanish Studies A/B*** (6 credits)
An introductory language course that develops all basic skills, with emphasis on the audio-visual approach; i.e., on speaking and understanding. It may be taken concurrently with SPAN C210 and/or SPAN C235. Lectures and laboratory.

SPAN C221 ***Introduction to Spanish Studies B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of SPAN C220. It is designed for students who have taken some Spanish at the CEGEP level or equivalent. May be taken concurrently with SPAN C211. Lectures and Laboratory.

SPAN C235 ***Translation I*** (6 credits)
This course will give the student sufficient training to read Spanish, and to translate from Spanish into English with reasonable competence. No previous knowledge of Spanish required. Texts will include a variety of reading material of current interest.
NOTE: This course alone may not be used as a prerequisite for advanced courses in Spanish.

SPAN C250 ***Intermediate Spanish A/B*** (6 credits)
Prerequisite: SPAN C210 or SPAN C220, or equivalent. Included in this course are a complete review of Spanish grammar and a study of some advanced aspects of usage. Composition and oral practice are emphasized. Selected readings will be assigned through which the student will become familiar with some aspects of Hispanic letters and civilization. This class will be conducted in Spanish.

SPAN C251 ***Intermediate Spanish B*** (3 credits)
Prerequisite: Permission of the Department. This course is equivalent to the second term of SPAN C250. It is designed for students who have taken at least four semesters of Spanish at the CEGEP level or equivalent. This class will be conducted in Spanish.
NOTE: Students who have taken SPAN C250 may not take this course for credit.

SPAN C255 ***Translation II*** (6 credits)
Prerequisite: SPAN C210 or SPAN C220, or equivalent. This course offers a complete review of Spanish grammar and deals with some advanced aspects of usage. Translation techniques are especially emphasized. Readings include novels and short stories.
NOTE: Students who received credit for SPAN C235 prior to 1980-81 may not take this course for credit.

SPAN C270 ***Spanish for Commerce and Administration*** (3 credits)
Prerequisite: SPAN C210 or equivalent. This course is intended for students in Commerce and Business Administration. Emphasis on Commerce terminology and the language of business.

SPAN 298 ***Special Topics in Spanish*** (3 credits)

SPAN 299 ***Special Topics in Spanish*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SPAN C300 ***Advanced Composition and Stylistics*** (6 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. The course treats in detail the finer points of Spanish stylistics. Special attention is given to creative composition and semantics.

SPAN C305 ***Translation III*** (6 credits)
Prerequisite: SPAN C255 or equivalent. This course offers to the advanced student practice in translation from English and French into Spanish. Specimen texts will include literary prose, commercial letters, journalistic articles, and a variety of material of current interest.

SPAN C360 ***Spanish Civilization*** (6 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. This course is designed to acquaint the student with Spain's intellectual and cultural history as reflected in its writers. Although the course is primarily concerned with ideas and aesthetics, attention will also be given to the development of language, customs, and folklore.

SPAN C361 ***Spanish-American Civilization*** (6 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A study of the development of Spanish-American civilization from pre-Columbian times to the present. The student will trace Spanish-American cultural and political thinking from Colonial times to the present, as reflected in the literature.

SPAN 398 ***Special Topics in Spanish*** (3 credits)

SPAN 399 ***Special Topics in Spanish*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

UNLESS OTHERWISE INDICATED, ALL COURSES WITH NUMBERS 400 AND HIGHER WILL BE CONDUCTED IN SPANISH

SPAN C405 ***The Middle Ages*** (6 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. Study of literary works from the twelfth to the fifteenth centuries. Particular emphasis will be placed on *El Poema de mio Cid*, the *Libro del buen amor*, and the *Celestina*.

SPAN C410 ***The Golden Age*** (6 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. This course is designed to introduce to the student the masterpieces of Spain's Siglo de Oro. Particular emphasis is given to Cervantes' *Don Quijote*. Analysis of some of the works of Lope, Tirso, and Calderon.

SPAN C415 ***Literature of the Eighteenth and Nineteenth Centuries*** (6 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A study of representative works of prose, poetry, and theatre of the writers of the eighteenth and nineteenth centuries, with particular attention given to such literary movements as romanticism, realism, and naturalism.

SPAN C420 ***The Generation of 1898*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A study of the major writers of this generation: Unamuno, Valle-Inclan, Machado, Baroja, Azorin, Maeztu, etc.

SPAN C425 ***The Group of 1927*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. Analysis of the poetry and theatre of Garcia Lorca and his contemporaries: Juan Ramon Jiménez, Guillén, Alberti, and others.

SPAN C430 ***Post-Civil War Literature*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. General characteristics of literature since the Civil War. A study of some of the following authors will be undertaken: Cela, Matute, Ferlosio, Martin-Santos, Sender, Goytisolo, etc.

SPAN C435 ***The Short Story: Spain*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A seminar on the principal writers of short stories in Spain.

SPAN C440 ***Romanticism and Modernism in Spanish America*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A study of the principal works and authors of these movements.

SPAN C445 ***Contemporary Spanish-American Literature*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A study of the major works of some of the following authors: Carpentier, Rulfo, Paz, Fuentes, Asturias, Garcia Marquez, Roa Bastos, Vargas Llosa, Borges, Cortazar.

SPAN C450 ***Mexican Literature*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A study of selected works from pre-Columbian times to the present.

SPAN C455 ***The Short Story: Spanish America*** (3 credits)
Prerequisite: SPAN C250 or SPAN C255, or equivalent. A seminar on the principal writers of short stories in Spanish America.

SPAN C465 ***History of the Spanish Language*** (6 credits)
Prerequisite: LING C200 either previously or concurrently; SPAN C250 or SPAN C255, or equivalent. A study of the origins of the Spanish language from Vulgar Latin into Old Spanish, and thence through the centuries. Attention will also be given to non-Latin contributions to the Spanish lexicon, stylistic development, and, especially, the parallel development of the other Romance vernaculars. This course will be conducted in English.
NOTE: This course may be taken for credit in the Linguistics Programme.

SPAN C470 ***Spanish Balladry*** (6 credits)
Prerequisite: SPAN C250 or equivalent. A study of the influence of the *romancero* in the literature of the Spanish-speaking world, from the traditional cycles (The Cid, King Arthur) to Garcia Lorca and contemporary modern balladry.

SPAN C480 ***Tutorial I*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in Spanish or Spanish-American language, and/or literature, to meet the student's individual needs.

SPAN C481 ***Tutorial II*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in Spanish or Spanish-American language, and/or literature, to meet the student's individual needs.
NOTE: Students who have received credit for SPAN C481 may register for SPAN C482 provided the subject matter is different.

SPAN C482 ***Tutorial III*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in Spanish or Spanish-American language, and/or literature, to meet the student's individual needs.
NOTE: Students who have received credit for SPAN C480 may register for SPAN C482, provided the subject matter is different.

SPAN C483 ***Tutorial IV*** (3 credits)
Prerequisite: Permission of the Department. Guided readings in Spanish or Spanish-American language, and/or literature, to meet the student's individual needs.
NOTE: Students who have received credit for SPAN C481 may register for SPAN C483, provided the subject matter is different.

SPAN 498 ***Advanced Topics in Spanish*** (3 credits)

SPAN 499 ***Advanced Topics in Spanish*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.220 Philosophy

Acting Chairman
J. DOYLE, *Associate Professor*

Professors
R.B. ANGEL
S.G. FRENCH
E. JOOS
A. KAWCZAK
D. LASKEY
D. PARK

Associate Professors
M.M. AHMAD
Sr. P. ALLEN
E. EGAN
C. GRAY
H. LAU
J. McGRAW
V. McNAMARA
D. O'CONNOR
J. ORNSTEIN
M. REIDY
V. ZEMAN

Assistant Professor
S. MULLETT

The Philosophy Department offers a number of programmes of study which include: Honours, Specialization, Major and Minor, and certain joint programmes. Double majors programmes are also offered in consultation with other departments. The Philosophy Department should be consulted for information concerning these programmes. Seminars and tutorials are offered mainly for students in a programme in Philosophy. In addition, courses are offered to students with a general or specific interest in Philosophy.

Students enrolled in Philosophy programmes are required to confirm their status with the Department during the second week of lectures of each year.

Students who already had Honours status by June 1, 1977, will continue to be governed by the requirements that applied at the date of their admission to the Honours programme.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours in Philosophy

Stage I
6 Chosen from PHIL C201[3], C202[6], C223[3], C245[3]
6 PHIL C241[6]
6 PHIL C310[6]

Stage II
6 Chosen from PHIL C224[6], C226[3] and C228[3], C321[6]
6 PHIL C412[6]
6 PHIL elective or cognate credits*

Stage III
6 Chosen from PHIL C313[6], C410[6], C469[6]
6 Chosen from PHIL C421[6], C449[6], C485[6], C486[3], C488[3]
6 PHIL C460[6]
6 *PHIL elective credits at the 300 or 400 level

**PHIL elective and cognate credits to be chosen in consultation with the Department.*

NOTE: Students preparing for graduate work should acquire a good reading knowledge of a related modern language or of Classical Greek or Latin.

60 BA Specialization in Philosophy

Stage I
6 Chosen from PHIL C201[3], C202[6], C223[3], C245[3]
6 PHIL C241[6]
6 PHIL C310[6]

Stage II
6 Chosen from PHIL C224[6], C226[3] and C228[3], C321[6]
6 PHIL C412[6]
6 Electives from related disciplines (with approval of the Department of Philosophy)

Stage III
6 Chosen from PHIL C313[6], C410[6], C469[6]
6 Chosen from PHIL C421[6], C449[6], C485[6], C486[3], C488[3]
6 PHIL C460[6]
6 PHIL elective credits at the 300 or 400 level*.

**PHIL elective credits to be chosen in consultation with the Department.*

36 BA Major in Philosophy

Stage I
6 Chosen from PHIL C201[3], C202[6], C223[3] and C245[3]
6 PHIL C310[6]

Stage II and III
6 Chosen from PHIL C241[6], C410[6], C412[6]
6 Chosen from PHIL C313[6], C412[6], C469[6]
12 PHIL elective credits to be chosen in consultation with the Department.

24 Minor in Philosophy

6 Chosen from PHIL C201[3], C202[6], C211[6], C223[3] and C245[3]
18 PHIL elective credits to be chosen in consultation with the Department.

48 BA Major in Political Philosophy

18 POLI C270[6], C370[6], C470[6]
6 Chosen from PHIL C201[3] and C223[3], C202[6], C211[6]
24 Chosen from PHIL C342[3], C344[3], C346[3], C469[6], C412[6], C417[6], POLI C372[6], SOCI C300[6]

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PHIL C201 ***Problems of Philosophy*** (3 credits)
This course is designed for students who wish to be acquainted with philosophy through problems rather than through the historical approach. Methods used in Philosophy will be discussed and topics, such as the existence of God, the mind-body problem, freedom and determinism, rights and duties, will be used to illustrate philosophical approaches.
NOTE: This course may not be taken for credit with PHIL C202.

PHIL C202 ***Introduction to Philosophy*** (6 credits)
A study of basic questions in the major areas of philosophy, and the classical attempts to answer them.
NOTE: This course may not be taken for credit with PHIL C201.

PHIL C211 ***Philosophical Classics*** (6 credits)
A critical discussion of selected philosophical classics. Readings will be chosen from Plato, Aristotle, Descartes, Hume, Kant, and one recent or contemporary philosopher.

PHIL C223 ***Critical Thinking*** (3 credits)
This course is designed to help students to think more clearly and critically and to improve their ability to present, defend, and evaluate arguments. Sample topics may include the nature of definition, validity and truth, formal and informal fallacies.

PHIL C224 ***Introduction to Logic*** (6 credits)
A study of the basic elements of Aristotelian and modern logic, including an analysis of argumentation, language, definition, fallacies, deduction, and induction.

PHIL C226 ***Elementary Deductive Logic*** (3 credits)
This course begins with an analysis of syllogistic logic and proceeds to an extensive treatment of propositional logic. The course will conclude with an examination of the rudiments of predicate logic. The techniques of constructing formal derivations will be included.

PHIL C228 ***Methods of Enquiry*** (3 credits)
A study of the methods and structure of basic types of organized knowledge: mathematics, science, history, and normative disciplines. This course will discuss crucial concepts in scientific methodology, such as the axiomatic system, the hypothetico-deductive method, and scientific explanation.

PHIL C230 ***Human Identity*** (3 credits)
A critical examination of some theories of human identity, including reference to male and female identity, the unity of self, and transcendence of self. Works will be selected from the history of philosophy, literature, and the social sciences.

PHIL C231 ***Introduction to General Systems Theory*** (6 credits)
An elementary survey of the transdisciplinary general systems approach. Such basic concepts as structure information and regulation will be explored, and a teleological framework suited to the social and behavioural sciences will be developed.

PHIL C240 ***Philosophy of Man*** (6 credits)
A study of representative classical and contemporary positions on human nature, action, and life. Such topics as knowledge, affectivity, freedom, person, will be treated.

PHIL C241 ***Ethics*** (6 credits)
A study of the principles underlying moral conduct with reference to classical and contemporary positions.

PHIL C242 ***Business Ethics*** (3 credits)
The purpose of this course is to elucidate the key ethical notions with reference to the business world. The intention is to make students aware of situations in which ethical implications arise rather than to impose specific rules.

PHIL C244 ***Social and Political Philosophy*** (6 credits)
Prerequisite: Six credits in Philosophy, or the permission of the Department. This course treats of the individual in relation to the State and Society through the reading and discussion of selected texts. Problems treated: political authority, its sources and varieties; the limits of political authority; classical images of man; personality and society; the paradox of social control.

PHIL C245 ***Philosophy and Society*** (3 credits)
The purpose of this course is to introduce students to the philosophical treatment of social problems. Examples would include conceptions of man as individual and as citizen, as free and as determined, as well as conceptions of the state and of the community.

PHIL C246 ***Introduction to Philosophy of Religion*** (3 credits)
This course examines the classical arguments for the existence of God. Course content includes the nature of faith and of religious experience, as well as the nature of religious language.

PHIL C248 ***Biomedical Ethics*** (3 credits)
This course is a study of the moral and legal norms involved in medical issues such as health care priorities; euthanasia; fertility control and abortion, protection of the incapable; preventive medicine; problems of physician and patient relationships; human experimentation; genetic engineering; and behaviour modification.

PHIL C255 ***Philosophy of Leisure*** (3 credits)
This course examines philosophical problems relating to such issues as: leisure, recreation, labour, time and fulfillment. The aim is to stimulate the student to think critically about the goals of individuals and of society as they concern these issues. The course will be of interest to students in Recreation and Leisure Studies and to others interested in the problems of using free time to best advantage.

PHIL 298 ***Special Topics in Philosophy*** (3 credits)

PHIL 299 ***Special Topics in Philosophy*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

PHIL C310 ***Ancient Western Philosophy*** (6 credits)
A study of the principal developments from the Presocratics through Plato and Aristotle up to Plotinus. Emphasis will be placed on the critical reading of selected texts.

PHIL C312 ***Existentialism*** (6 credits)
A course designed to acquaint the student with the fundamentals of the existentialist movement as a philosophical perspective. Among philosophers considered will be Kierkegaard, Nietzsche, Heidegger, Sartre, Merleau-Ponty, Jaspers, Marcel, and Berdyaev.

PHIL C313 ***Contemporary Philosophy*** (6 credits)
Prerequisite: Six credits in Philosophy, or permission of the Department. A study of selected philosophers of the twentieth century. Movements and figures discussed vary from year to year. Such topics as the following will be considered: Positivism, Pragmatism, Marxism, Phenomenology, Existentialism, and Philosophical Analysis.

PHIL C321 ***Symbolic Logic*** (6 credits)
An introduction to modern formal logic, its techniques and applications. The course covers sentential logic, first-order predicate logic with identity, intuitive set theory, relations, and functions.

PHIL C328 ***Conceptual Revolutions in Twentieth Century Science I*** (3 credits)
This course will begin with a consideration of the structure and growth of scientific theories and of the relationship between theory and observation. This will be followed by a fairly detailed exposition of Einstein's theories of special relativity and general relativity. The philosophical implications of the two theories will be carefully considered, with particular attention being devoted to the fundamental revisions of the concepts of space and time, which these theories have forced upon us.

PHIL C329 ***Conceptual Revolutions in Twentieth Century Science II*** (3 credits)
The major part of this course will be devoted to the conceptual development of quantum mechanics, with special attention to such topics as the wave-particle duality, causality and determinism, the principle of indeterminacy, and the distinction between the knowing subject and the object of knowledge. It will conclude with a discussion of Gödel's celebrated incompleteness theorem, which has profound implications concerning our views on the relationship between logic and mathematics, the nature of mathematical truth and even for the ultimate prospects for the field of artificial intelligence.

PHIL C331 ***Philosophical Ideas in Literature*** (6 credits)
Prerequisite: Second-year standing, or permission of the instructor. A critical examination of philosophical ideas as expressed in various literary works. The subject matter is chosen for its relevance to such themes as the nature of man, the nature of the good life, and the relation of man to society.

PHIL C334 ***Anarchism and Marxism*** (3 credits)
The contradictory character of Russian cultural and philosophical development is used as a basis for an analysis of the main philosophical differences between Anarchism and Marxism as presented in the works and activities of its main protagonists (Bakunin, Kropotkin, Plekhanov, Lenin). Philosophical relevance of such major Russian writers as Dostoyevsky, Tolstoy, and Solzhenitsyn will be shown as well.

PHIL C335 ***Contemporary Marxism*** (3 credits)
Critical and comparative analysis of different schools and individual thinkers of twentieth-century Marxism, in particular, those in Russia, Germany, and France. These positions will be considered primarily on their philosophical merits.

PHIL C338 ***Philosophical Psychology*** (3 credits)
A critical examination of the explanation of human behaviour and the self in the light of new

developments in philosophy and psychology. Detailed studies of selected problems such as motives, intention, the concept of person, choice, reason, freedom, purpose, and action.

PHIL C340 ***Contemporary Theories of Love*** (6 credits)
Prerequisite: One previous course in Philosophy. A two-semester topical analysis of love and attendant phenomena, with special emphasis on their metaphysical, epistemological, psychological, aesthetic, social, theological, and linguistic dimensions. The classes will be conducted on a lecture-seminar basis.

PHIL C341 ***Political Philosophy*** (6 credits)
Prerequisite: Six credits in Philosophy, or the permission of the Department. This course concentrates on the theoretical foundations of communism, fascism, and democracy through the reading and discussion of selected texts.

PHIL C342 ***Political Philosophy*** (3 credits)
Prerequisite: Second-year standing, or permission of the Department. Critical analysis of contemporary political-philosophical concepts, such as tolerance, violence, separatism, racism, and the nationalism of visible minorities.

PHIL C344 ***Law, Liberty, and Human Rights*** (3 credits)
In this course, the student will examine several perspectives from which the problem of the relation between law and morality may be treated. Conflicting concepts of law, morality, and the relation of the individual to society will be discussed. The problem of authority will be examined in relation to issues of civil liberties, civil rights, and the social basis of legal conflicts.

PHIL C345 ***Philosophy of Social Science*** (6 credits)
Prerequisite: Six credits in Philosophy or third-year standing in a social science department, or permission of the Department. Following the distinction between natural and social sciences, this course will be concerned with philosophies of the social sciences. It will investigate the structure, methodology, and problems of these sciences toward understanding and clarifying how they function as quasi-separable disciplines and how they contribute to a wider understanding of man and his varied social relations.

PHIL C346 ***Philosophy of Social Science*** (3 credits)
Philosophical examination of the structure and methodology of the social sciences. Special attention to problems of functionalism, teleological explanation, and the testing of social theories.

PHIL C347 ***Phenomenology and Psychology*** (3 credits)
This is an introduction to the fundamentals of Phenomenology through a study of conscious experience, both subjective and intersubjective. Standard psychological models and methods will be examined in order to open up phenomenological alternatives in the fields of aesthetics, literary criticism, religious and moral experience. Phenomenology complements psychological research in these areas.

PHIL C348 ***Philosophy of Culture*** (6 credits)
Prerequisite: Six credits in Philosophy, or the permission of the Department. This course entails a philosophical critique of contemporary culture, stressing such issues as identity crisis, the weakening of structures of orthodoxy, meditation and humour in relation to the vita activa, work in relation to labour, and the socio-cultural manifestation of value crisis.

PHIL C349 ***Philosophy of Education*** (6 credits)
An examination of philosophical principles underlying educational theories and of the problems arising from the practical implementation of those theories.

PHIL C350 ***Philosophy of Communication*** (6 credits)
This course is concerned with a philosophical analysis of the foundations of communication acts: linguistic and non-linguistic, cognitive and affective. Philosophical sources may include: F. Nietzsche, M. Black, M. Merleau-Ponty, and P. Ricoeur.

PHIL C351 ***Philosophy of Religion*** (6 credits)
Prerequisite: Six credits in Philosophy, or permission of the Department. A critical assessment of modern developments in Philosophy regarding the question of whether thinking man can maintain a religious belief in God.

PHIL C352 ***Philosophy of History*** (6 credits)
Prerequisite: Second- or third-year standing in a History programme, or permission of the Philosophy Department. An analysis of the nature of historical knowledge and explanation will be followed by a study of classical and contemporary attempts to elucidate the meaning of history. Authors discussed include Augustine, Vico, Kant, Hegel, Marx, Spengler, Popper, Toynbee.

PHIL C353 ***Aesthetics I*** (3 credits)
Prerequisite: Second-year standing, or permission of the Department. A philosophical analysis of selected aspects of the aesthetic experience and the logic of appraisal. Specimen topics include: perception in art, symbolic expression, the role of feeling and emotion in aesthetic judgment, objectivity and subjectivity of value judgments, commensurability of values.

PHIL C354 ***Artificial Intelligence*** (3 credits)
Prerequisite: Six credits in Philosophy or in Computer Science. The purpose of this course is to explore the analogy between mental activity and the operation of computers or "electronic brains", with a view to answering the question: Can machines think? Such topics as the following will be treated: the concept of the Turing machine; the Turing test of intelligence; the functionalist theory of the mind; the nature of creativity; and the alleged implications of Godel's incompleteness theorem.

PHIL C357 ***Philosophy of Law: General Jurisprudence*** (3 credits)
A philosophical study of natural law, legal positivist and legal realist replies to the question of what law is. Contemporary and classical replies are criticized and are applied to cases. The associated issues of legal moralism, legal justice, legal obligation and its limits, and legal reasoning are treated.

PHIL C358 ***Legal Philosophy: Legal Rights and Duties*** (3 credits)
A philosophical study of the nature, sources and functions of rights and duties. Attention is given to the particular rights associated with contract and property, and their abuse, to duties arising by law alone, to excuses and justifications for failure to fulfill duties, and to enforcement, punishment and compromise.

PHIL C362 ***Second-Year Seminar*** (6 credits)
Prerequisite: Second-year standing in a philosophy programme, or permission of the Department. Problems in Moral Philosophy, with topics to be announced. This seminar will conduct the students through a series of problems on moral topics.

PHIL 398 ***Intermediate Special Topics in Philosophy*** (3 credits)

PHIL 399 ***Intermediate Special Topics in Philosophy*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

PHIL C410 ***Medieval Philosophy*** (6 credits)
Prerequisite: PHIL C310, or permission of the Department. A study of Western Philosophy from Augustine to the later Scholastics.

PHIL C412 ***Modern Philosophy*** (6 credits)
Prerequisite: Six credits in Philosophy, or permission of the Department. A study of Western Philosophy from Descartes to Hume.

PHIL C417 ***Nineteenth-Century Philosophy*** (6 credits)
Prerequisite: Six credits in Philosophy, or permission of the Department. An examination of some of the main currents of post-Kantian philosophy. Hegel and the post-Hegelians, the romantic reaction, positivism, and pragmatism.

PHIL C421 ***Philosophy of Science*** (6 credits)
Prerequisite: One course in logic, or permission of the Department. A critical examination of problems pertaining to the structure and status of scientific theories and the logic of scientific inference. Such topics as the following will be discussed: explanation, confirmation, verifiability and falsifiability, problems of definition, observational and theoretical terms, models and analogies.

PHIL C422 ***Advanced Topics in Logic*** (3 credits)
Prerequisite: A 300-level course in Symbolic Logic, or permission of the Department. This course is designed to extend the basic knowledge of logic by introducing students to areas such as modal logic, deontic logic, higher-order calculi, logical theory, and logical semantics.

PHIL C449 ***Phenomenology*** (6 credits)
Prerequisite: Twelve credits in Philosophy, or permission of the Department. Origins and development of phenomenology from Brentano and Meinong through the different stages of Husserl's writings. Post-Husserlian modifications will be considered briefly. The second term will be devoted to a discussion of the influence of the phenomenological movement on contemporary developments in the social sciences and humanities. Actual topics will be determined by the student's areas of interest and academic qualifications.

PHIL C453 ***Epistemology*** (6 credits)
Prerequisite: Twelve credits in Philosophy, or permission of the Department. A study of characteristic problems in epistemology, with particular emphasis on their historical and systematic contexts. The concepts analyzed include fundamental questions in the empirical sciences.

PHIL C454 ***Metaphysics*** (6 credits)
Prerequisite: Twelve credits in Philosophy, or permission of the Department. In this course, metaphysics will be treated in two ways: firstly, the problem of being in classical and contemporary ontologies; secondly, the metaphysical suppositions underlying epistemological, moral, and social theories.

PHIL C455 ***Aesthetics II*** (6 credits)
Prerequisite: Six credits in Philosophy, or permission of the Department. This course will examine

central problems in the philosophy of art and sensibility, examining the works of major authors in this area, such as Aristotle, Longinus, Kant, Hegel, Dewey, Santayana.

PHIL C456 ***Recent Ethical Theory*** (6 credits)
Prerequisite: Six credits in Philosophy, or permission of the Department. A critical analysis of leading contemporary ethical theories from Moore to the present. Special attention is given to the naturalistic fallacy, the reducibility or normative statements, ethical reasoning, and the relation of ethics to psychology and sociology.

PHIL C457 ***Philosophy of God*** (6 credits)
Prerequisite: Six credits in Philosophy, or permission of the Department. The problem of the natural knowledge of God, including readings from Plato, Aristotle, Anselm, Aquinas, Descartes, Hume, Pascal, Kant, Hegel, Feuerbach, Marx, Kierkegaard, Newman, Nietzsche, Sartre, Ayer, and Russell.

PHIL C460 ***Honours Seminar in Epistemology and Metaphysics*** (6 credits)
Prerequisite: Second-year standing. Intensive study of major contemporary issues in the theory of knowledge and metaphysics, designed to accommodate honours students in any department.

PHIL C469 ***Contemporary Analytic Philosophy*** (6 credits)
Prerequisite: Twelve credits in Philosophy, or permission of Department. A seminar devoted to the investigation of selected philosophical problems as they arise in the writings of such philosophers as Moore, Russell, Ayer, Carnap, Quine, Wittgenstein, Ryle, Wisdom, Austin, and others.

PHIL C471 ***Tutorial in Philosophy*** (3 credits)
Prerequisite: Eighteen credits in Philosophy, or permission of the Department. If permission for a tutorial is granted, the tutorial Director will supervise an intensive reading programme in the student's area of special interest.

PHIL C472 ***Tutorial in Philosophy*** (3 credits)
Prerequisite: Eighteen credits in Philosophy, or permission of the Department. If permission for a tutorial is granted, the tutorial Director will supervise an intensive reading programme in the student's area of special interest.

PHIL C485 ***Kant*** (6 credits)
Prerequisite: Twelve credits in Philosophy, or permission of the Department. An intensive study of Kant's *Critique of Pure Reason* and related works.

PHIL 498 ***Advanced Topics in Philosophy*** (3 credits)

PHIL 499 ***Advanced Topics in Philosophy*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.230 Physics

Chairman
C.S. KALMAN, *Professor*

Professor
S.K. MISRA

Associate Professors
D.E. CHARLTON
M.S. DUBAS, s.j.
C.E. EAPPEN
N.W. EDDY
B. FRANK
A.L. KIPLING
R.L. KOVACS
J.A. MACKINNON
S.P. MORRIS
J.P. PETOLAS
R.C. SHARMA
J. SHIN

Adjunct Assistant Professors
N.B. LEWIS
S.G. ZENONE

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

72 BSc Honours in Physics
Stage I
15 PHYS C232[3], C243[3], C244[3], C253[3], C254[3]
4 Chosen from PHYS C291[1], C292[1], C293[1], C294[1], C295[2]
Stages II and III
35 PHYS C335[3], C336[3], C344[3], C352[3], C354[3], C364[3], C392[1], C394[1], C434[3], C435[3], C456[3], C477[3], C478[3]
6 MATH C261[6]
12 Credits to be chosen, either with the approval of the Department, or from the following two patterns -
A: Experimental, or
B: Theoretical.

Pattern A: Experimental
12 credits chosen from PHYS C355[3] or C465[3] or C467[3] or C457[3] or C345[3], C494[1] or C495[1], C295[2], or both C291[1] and C292[1], C296[2], C496[4]

Pattern B: Theoretical
9 credits chosen from PHYS C345[3], C355[3], C465[3], C467[3], C457[3], and 3 credits chosen from PHYS C295[2], or both C291[1] and C292[1]; C494[1] or C495[1]

63 BSc Specialization in Physics
Stage I
15 PHYS C232[3], C243[3], C244[3], C253[3], C254[3]
4 Chosen from C291[1], C292[1], C293[1], C294[1], C295[2]
Stages I, II and III
20 PHYS C335[3], C352[3], C354[3], C364[3], C392[1], C394[1], C434[3], C477[3]
6 MATH C261[6]
18 Credits to be chosen, either with the approval of the Department, or from the following two patterns -
A: Experimental, or
B: Theoretical

Pattern A: Experimental
18 PHYS C295[2] and C296[2], or C291[1] and C292[1] and C293[1] and C294[1]; C355[3], C465[3] or C467[3], C478[3]; C494[1], C496[4]

Pattern B: Theoretical
12 PHYS C336[3], C344[3], C456[3], C478[3]
3 PHYS C435[3] or C465[3] or C467[3]
3 PHYS C345[3] or C457[3]

80 BSc Specialization in Geology-Physics
See Section 31.140—Geology

90 BSc Specialization in Physics/Marketing
24 PHYS C243[3], C244[3], C253[3], C254[3], C291[1], C292[1], C293[1], C294[1], C295[2], C296[2], C364[3], C394[1]
12 To be chosen from PHYS C232[3], C335[3], C336[3], C344[3], C345[3], C352[3], C354[3], C355[3], C392[1], C395[5], C396[5], C397[5], C434[3], C435[3], C456[3], C457[3], C465[3], C467[3], C477[3], C478[3], C481[3], C494[1], C495[1]
6 MATH C261[6]
6 QUAN C243[3], C244[3], or equivalent
3 COMP C211[3]
6 ACCO C213[3], C218[3]
6 MANA C266[3], C340[3]
6 ECON C201[3], C203[3]
6 MARK C213[3], C350[3]
15 Chosen from the Department of Marketing

36 BSc Major in Physics
Stages I, II and III
15 PHYS C243[3], C253[3], C254[3], C291[1], C293[1], C364[3], C394[1]
9 Chosen from PHYS C232[3], C244[3], C292[1], C294[1], C295[2], C335[3], C336[3], C344[3], C352[3], C354[3], C392[1], C434[3], C435[3], C456[3], C477[3], C478[3]
12 To be chosen with the approval of the Department

NOTE: Students following a Major in Physics must register with the Department by November 1 of each year.

24 Minor in Physics
These credits are to be chosen in consultation with the Department.

NOTE: Students following a Minor in Physics must register with the Department by November 1 of each year.

32 Certificate in Scientific Measurement (Biology Option)
12 BIOL C220[3], C222[3], C223[3], C230[3]
6 CHEM C311[2], C316[1], C390[2], C399[1]
14 PHYS C295[2], C296[2], C396[5], C397[5]

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

33 Certificate in Scientific Measurement (Chemistry Option)
19 CHEM C211[6], C310[2], C314[2], C315[1], C319[1], C390[2], C399[1], C490[3], C499[1]
14 PHYS C295[2], C296[2], C396[5], C397[5]

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

32 Certificate in Scientific Measurement (Physics Option)
18 PHYS C253[3], C254[3], C293[1], C294[1], C295[2], C296[2], C354[3], C355[3]
3 Chosen from PHYS C243[3], or C352[3] or C364[3]
5 Chosen from PHYS C395[5], or C396[5] or C397[5]
6 MATH C261[6]

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

NOTE:
In general, experiments involved in the laboratory courses on the Sir George Williams Campus can be done from week to week, at variable times chosen by the student.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PHYS C204 ***Mechanics*** (3 credits)
Prerequisite: CEGEP Mathematics 103 or equivalent, previously or concurrently. Kinematics, Newton's Laws of Motion. Statics, Dynamics. Conservation of momentum and energy. Rotational motion. Periodic motion. Lectures only.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration. See PHYS C224 for laboratory associated with this course.

PHYS C205 ***Electricity and Magnetism*** (3 credits)
Prerequisite: PHYS C204 or equivalent. Electrical charge and Coulomb's Law. Electrical field and potential. Capacity, Steady state, and transient currents. Electro-magnetic induction and alternating currents. Lectures only.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration. See PHYS C225 for laboratory associated with this course.

PHYS C206 ***Waves and Modern Physics*** (3 credits)
Prerequisite: PHYS C204 or equivalent. Simple harmonic motion. Wave propagation. Superposition. Stationary waves. Doppler effect. Interference. Diffraction. Photoelectric effect. Compton effect. Bohr's atom. Radioactivity, fission, fusion. Lectures only.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration. See PHYS C226 for laboratory associated with this course.

PHYS C207 ***Heat and Sound*** (3 credits)
Prerequisite: 6 credits of Collegial Physics, and 6 credits of Collegial Calculus or equivalent. Temperature and thermometry, heat effects, measurement and transfer, thermal properties of matter, thermodynamics, first and second laws, kinetic theory, waves, vibrations, and accoustical phenomena. Lectures: 3 hours per week.
NOTE: This course is intended for pre-Engineering students. Students in programmes leading to the B.Sc. degree may not take this course for credit.

PHYS C210 ***Discoveries in Physics*** (6 credits)
A non-mathematical course in physics specifically designed for students who have had little or no experience in physics. It traces the fundamental ideas from which modern physics has emerged and attempts to develop insights into the understanding of natural phenomena. Lectures only.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit.

PHYS C215 ***The Mechanics of Visual Representation*** (3 credits)
An introductory course combining laboratories and lectures illustrating the basic laws that govern

the mechanism of image reproduction. Relevant topics concerning the interaction of light and materials are discussed and demonstrated. Students perform experiments with light-sensitive materials, the pinhole camera, light intensity, and illumination measurement. Human visual response, the gray scale, sensitometry, densitometry, the characteristic curve and ASA, DIN; film speeds are examined in depth. This course parallels CHEM C280, and both are designed to complement COMS C275 (Visual Dynamics I). This course is designed for students in Communication Studies. Laboratory and lectures: 3 hours per week.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit.

PHYS C217 ***The Physics of Photo-Reproduction*** (3 credits)
Prerequisite: PHYS C215. A combined laboratory and lecture course designed for students in Communication Studies who have some basic knowledge of physical laws. Ideas introduced in the "Mechanics of Visual Representation" (PHYS C215) are further developed, covering such topics as exposure measurements and control, and the Standard Association Institute Photographic Exposure Guide. The mechanics of a lens, image formation, f-stops diaphragm openings, the 3-colour composition of light, the colour-temperature scale, and filters are studied. This course is designed so that the student will gain an intelligent and efficient use of his equipment. Laboratory and lecture: 3 hours per week.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit.

PHYS C219 ***Physics of Photography*** (3 credits)
Prerequisite: 6 credits of Collegial physics, or the equivalent. This course is intended for students in university science programmes. It includes the following topics: Light, illumination; the photographic process, tone reproduction, the gray scale; sensitometry: the characteristic curve; characteristic curve analysis, gamma, contrast index, film speeds; exposure measurement and control; the exposure guide; previsualization, exposure zones; correct exposure, control of development, Optics: image formation, lenses, standards of definition, depth of focus, depth of field; covering power, perspective; image brightness, exposure, shutters; colour analysis, filters,. Lectures and laboratories: 3 hours per week.

PHYS C224 ***Introductory Experimental Mechanics*** (1 credit)
Prerequisite: PHYS C204, previously or concurrently, or permission of the Department. A laboratory course covering fundamental experiments in classical mechanics. Experiments will include: Resolution of forces, centrifugal force and conservation of energy, pendulums. Laboratory only, 10 experiments.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

PHYS C225 ***Introductory Experimental Electricity*** (1 credit)
Prerequisite: PHYS C205, previously or concurrently, or permission of the Department. A laboratory course covering fundamental experiments in electricity. Experiments will include Kirchoff's Law, resistors in series and parallel, oscilloscope, induction, Alternating Current. Laboratory only. 10 experiments.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

PHYS C226 ***Introductory Experimental Waves and Modern Physics*** (1 credit)
Prerequisite: PHYS C206, previously or concurrently, or permission of the Department. A laboratory course covering the fundamental experiments in waves and modern physics. Experiments include spectrometer measurements. Newton's rings and measurements involving radioactivity. Laboratory only. 10 experiments.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit to be applied to their programme of concentration.

PHYS C232 ***Theoretical Physics I*** (3 credits)
Prerequisite: MATH C261, previously or concurrently. Introduction to linear algebra. Ordinary Vector Calculus, matrices, determinants, system of linear equations; Introduction to ordinary differential equations with application to physics. (Linear first-order and second-order ordinary differential equations, Wronskian, non-homogenous differential equations, power-series method, problems from mechanics and electricity). Lectures only.

PHYS C241 ***Biomechanics of Human Motion*** (3 credits)
Prerequisite: PHYS C204 or CEGEP Physics 101. The application of elementary laws of mechanics to the understanding of static equilibrium conditions of the human body subjected to external forces - the efficiency of human movement seen from the reference point of physical laws as applied to sports. This course is intended for the physio-therapist, the athlete, and all those interested in understanding body mechanics in the light of inanimate physical laws. Lectures only.
NOTE: Students who have credits for PHYS C243 or equivalent may not take this course for credit.

PHYS C243 ***Classical Mechanics I*** (3 credits)
Prerequisite: PHYS C204 or CEGEP Physics 101; MATH C261, previously or concurrently. Fundamental concepts, the laws of motion, equilibrium of forces, friction, forces of constraint, centre of mass, work, potential, motion of a particle, motion in resisting media, simple harmonic oscillation, damped oscillations. Lectures only.
NOTE: See PHYS C291 for laboratory associated with this course.

PHYS C244 ***Classical Mechanics II*** (3 credits)
Prerequisite: PHYS C243 or equivalent. Central forces, Kepler's Laws, dynamics of a system of particles, mechanics of rigid bodies, Lagrange's equations, Hamilton's equations. Lectures only.
NOTE: See PHYS C292 for laboratory associated with this course.

PHYS C253 ***Electricity and Magnetism I*** (3 credits)
Prerequisite: PHYS C205 or CEGEP Physics 201, or equivalent; MATH C261, previously or concurrently. Electric charge, Coulomb's Law, electrostatic forces, electric field, Gauss's Law, electric potential, stored energy. Dielectrics, properties of materials in electric fields. Electric current, conduction in a vacuum and in material media, displacement current, magnetic field of a current, force on a current-carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism in material media, magnetic circuits, Time-varying fields. Capacitance, resistance, inductance; circuitry. Lectures only.
NOTE: See PHYS C293 for laboratory associated with this course.

PHYS C254 ***Electricity and Magnetism II*** (3 credits)
Prerequisite: PHYS C253. The field concept. Maxwell's equations. Boundary conditions. Power and energy. The electrostatic field. Electrostatic potential. The concept of capacitance. Polarization. The concept of local field in matter. The magnetostatic field. The Biot-Savart law. The scalar magnetic potential. Plane waves. Total internal reflection. Lectures only.
NOTE: See PHYS C294 for laboratory associated with this course.

PHYS C270 ***Introduction to Energy and Environment*** (3 credits)
This course is designed for students who have little or no background in physics. Topics covered include: Relationship of physics to environment and energy. Concept and definition of work and energy. Interaction of man and inanimate objects with the environment. Heat and chemical energy. Electromagnetic and nuclear energy. Conservation of energy - how it affects everyday life. Sources of energy used on earth. Solar energy. Production of wind power, water power, solar cells from sun's energy, biological uses, biopower. Lectures only.
NOTE: Students in programmes leading to the B.Sc. degree may not take this course for credit.

PHYS C273 ***Energy and Environment*** (3 credits)
Prerequisite: PHYS C270, or 6 credits in CEGEP Physics or equivalent. Nuclear energy stored in the earth. Geothermal energy. Biological energy stored in the earth. Second law of thermodynamics. Entropy. Food energy. Home heating and cooling. Solar heating. Transportation of man, goods, and energy. Recycling materials. Resource conservation and man's ability to change - need for a conservation ethic, need for alternate energy sources, need for public knowledge. Lectures only.

PHYS C291 ***Experimental Mechanics I*** (1 credit)
Prerequisite: PHYS C243, previously or concurrently. A laboratory course in mechanics. Experiments include pendulum, coefficient of restitution, centrifugal force, rotational inertia, inelastic impact.

PHYS C292 ***Experimental Mechanics II*** (1 credit)
Prerequisite: PHYS C291. A laboratory course in mechanics. Experiments include the use of air tracks to study acceleration, collisions, dissipative forces, and periodic motion. Other experiments include viscosity and surface tension of liquids.

PHYS C293 ***Experimental Electricity and Magnetism I*** (1 credit)
Prerequisite: PHYS C253, previously or concurrently. A laboratory course in electricity and magnetism. Experiments include motion of electrons in electric and magnetic fields, exponential relaxation, damped oscillations, resonance, nonlinearity, negative resistance.

PHYS C294 ***Experimental Electricity and Magnetism II*** (1 credit)
Prerequisite: PHYS C293. A laboratory course in electricity and magnetism. Experiments include the transistor, amplification and frequency response, transient response and negative feedback, positive feedback and oscillation, periodic structures.

PHYS C295 ***Experimental Electronics I*** (2 credits)
Prerequisite: PHYS C225 or CEGEP Physics 201, or equivalent. A practical laboratory course in electronics. Experiments include resistors in series and parallel, voltmeter, Ohm's Law, Kirchhoff's Current and Voltage Laws, Ohmmeter, capacitor, inductor, transformer, rectifiers, voltage doubler, zener diode, power supplies.

PHYS C296 ***Experimental Electronics II*** (2 credits)
Prerequisite: PHYS C295. A practical laboratory course in electronics. Experiments include oscilloscope, biasing of bipolar transistors, transistor amplifiers, voltage and current regulators, field-effect transistor, oscillators, operational amplifier circuits, audio amplifier, I-F transformer, limiter, amplitude and frequency modulation.

PHYS 298 ***Selected Topics in Physics*** (3 credits)

PHYS 299 ***Selected Topics in Physics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

PHYS C335 ***Theoretical Physics II*** (3 credits)
Prerequisite: PHYS C232 or equivalent. Linear Algebra: Linear Map, Linear coordinate transformations, eigenvalue problem, Vector space of functions, Sturm-Liouville problem, Fourier Series and applications. Lectures only.

PHYS C336 ***Theoretical Physics III*** (3 credits)
Prerequisite: PHYS C335 or equivalent. Classification and derivation of partial differential equations in physics. Separation of variables technique. The Fourier method for solving partial differential equations. Special Functions. Application to physical problems arising from electro-statics, heat conduction, wave propagation, etc. Lectures only.

PHYS C344 ***Advanced Classical Mechanics*** (3 credits)
Prerequisite: PHYS C232; PHYS C244; or equivalent. Lagrangian and Hamiltonian dynamics, collision between particles, motion of rigid bodies, Hamilton-Jacobi theory, small oscillations. Lectures only.

PHYS C345 ***Special Relativity*** (3 credits)
Prerequisite: PHYS C244; PHYS C254. Historical introduction, Einstein and relativity, application of the Lorentz transformation, four-vectors, the Lorentz invariance of physical theories. Lectures only.

PHYS C352 ***Optics*** (3 credits)
Prerequisite: PHYS C205, or CEGEP equivalent. Geometrical optics: General treatment of optical systems. Wave optics: review of simple harmonic motion, wave equation, superposition of waves, electromagnetic waves, scattering, polarization, interference-coherent sources, interference-uniformly extended sources, diffraction, waves in a dispersive medium, lasers. Lectures only.

PHYS C354 ***Electronics I*** (3 credits)
Prerequisite: PHYS C205 or CEGEP Physics 201, or equivalent. Semi-conductor physics: p-n junction, bipolar transistor, field-effect transistor, circuit theory, diode applications, bipolar transistor: h-parameters, small-signal amplifiers. Lectures only.
NOTE: See PHYS C295 and C296 for associated laboratory courses.

PHYS C355 ***Electronics II*** (3 credits)
Prerequisite: PHYS C354. Biasing of Transistors; Feedback Analysis, Common Circuits involving Operational Amplifiers; Large Signal Amplifiers, Digital Circuits: gates, flip-flops, logic functions. Lectures only.

PHYS C364 ***Atomic Physics*** (3 credits)
Prerequisite: PHYS C205 or the CEGEP equivalent. Special relativity. Wave-particle duality. The Rutherford atom, the Bohr-Sommerfeld atom. Origin of quantum theory. Schroedinger's equation. Electrons and ions. Electromagnetic radiation. Atomic structure. Lectures only.
NOTE: This course should not be taken before the second year of university studies. See PHYS C394 for laboratory associated with this course.

PHYS C384 ***Introduction to Astronomy*** (3 credits)
Prerequisite: PHYS C205; MATH C205 or equivalent. The celestial sphere. The Solar System. Celestial mechanics. Basic stellar characteristics. The Galaxy—structure and content. Extragalactic objects. Lectures only.

PHYS C385 ***Astrophysics*** (3 credits)
Prerequisite: PHYS C384. The stars, stellar atmospheres, motion, interiors and populations. Variable stars. Nebulae. Radio, X-ray and infrared sources. The galaxy-population and dynamics. The extragalactic universe. Lectures only.

PHYS C392 ***Experimental Optics*** (1 credit)
Prerequisite: PHYS C352, previously or concurrently. An experimental course in optics. Experiments include diffraction, optical instruments, resonance, and various experiments using lasers. Laboratory only, 10 experiments.

PHYS C394 ***Experimental Atomic Physics I*** (1 credit)
Prerequisite: PHYS C364, previously or concurrently; PHYS C226 or CEGEP Physics 301 or equivalent, or permission of the Department. An experimental course in atomic physics. Experiments include the Frank-Hertz experiment, the Zeeman effect, Mass spectrometer, and some X-ray work. Laboratory only, 10 experiments.

PHYS C395 ***Communication Media Electronics*** (5 credits)
Prerequisite: PHYS C296 or equivalent. Distortion, Noise, i.f. transformers, converters, power supplies, superheterodyne circuits, video amplifiers and detectors, VHF and UHF tuning, automatic gain control, FM and FM detectors, synchronization circuits, sweep circuits, automatic frequency and phase control, color demodulation, burst-gate amplifiers, chromabandpass amplifiers, static convergence, dynamic convergence, high-voltage generators. Techniques of troubleshooting electronic circuits. Laboratory only.

PHYS C396 ***Computer Electronics*** (5 credits)
Prerequisite: PHYS C296 or equivalent. Diode clipping circuits, transistor as a switch, multivibrator circuits, logic circuits. Study and troubleshooting of integrated circuit logic gates, J-K flip-flops,

analogue-to-digital and digital-to-analogue converters, frequency-divider circuits, digital multiplexers and demultiplexers, pulse-distributor logic gates. Study and implementation of basic logic functions and Boolean expressions to programme a small digital computer. Laboratory only.

PHYS C397 ***Experimental Medical Electronics*** (5 credits)
Prerequisite: PHYS C296 or equivalent. A laboratory course in the maintenance and use of medical instruments, including ECG monitor, electro-cardiograph, cardiotachometer, blood-pressure recorder, respiration-rate recorder, and clinical thermometer. The component parts of the instruments are studied first, and then the instruments are constructed and operated. Laboratory only.

PHYS 398 ***Selected Topics in Physics*** (3 credits)

PHYS 399 ***Selected Topics in Physics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

PHYS C434 ***Thermodynamics*** (3 credits)
Prerequisite: PHYS C204 or CEGEP PHYS 101; MATH C205 or CEGEP MATH 203. Temperature, simple thermodynamic systems; work, heat, and first law; ideal gas, Van der Waal's gas, heat engines, reversible and irreversible processes; entropy, second law, thermodynamics potentials, kinetic theory. Maxwell distribution, mean free path. Lectures only.
NOTE: This course should not be taken before the second year of university studies. See PHYS C494 for laboratory associated with this course.

PHYS C435 ***Statistical Physics*** (3 credits)
Prerequisite: PHYS C364; PHYS C434. Basic probability concepts, statistical description of systems of particles, thermal interactions, microscopic theory and macroscopic measurements, temperature and entropy, M-B, E-D, B-E statistics. Canonical distribution in the classical approximation, general thermodynamics interaction. Lectures only.

PHYS C436 ***Theoretical Physics IV*** (3 credits)
Prerequisite: PHYS C232. Theory of Complex variables leading to Residue theory, with applications to Physics. Tensor calculus: tensor algebra; line element, covarient differentiation; applications. Lectures only.

PHYS C456 ***Electromagnetic Theory I*** (3 credits)
Prerequisite: PHYS C254; PHYS C336. Derivation of the laws of electrostatics and magnetostatics from the basic experimental laws; methods of images; solutions of Laplace's and Poisson's equations for electrostatic problems, magnetism, Maxwell's equations. Lectures only.

PHYS C457 ***Electromagnetic Theory II*** (3 credits)
Prerequisite: PHYS C456. Wave Solution of Maxwell's equations in various media. Classical model of a dielectric. Helmholtz equation and wave equation by Green's functions. Multipole fields. Interaction of charged particles. Radiation by moving charges. Abraham-Lorentz theory.

PHYS C465 ***Nuclear Physics*** (3 credits)
Prerequisite: PHYS C364. Discussion of nuclear properties. The deuteron nuclear structure and models. Scattering. Nuclear transitions, disintegrations, and reactions. Radioactivity and decay laws. Passage of radiation through matter, shielding, radiation dosage. Detection and acceleration of particles. Neutrons. Nuclear reactors. Environmental concerns. Lectures only.
NOTE: See PHYS C495 for laboratory associated with this course.

PHYS C467 ***Solid State Physics*** (3 credits)
Prerequisite: PHYS C477 previously or concurrently. Crystal structure of solids. Lattice dynamics. Specific heat. Electrons in metals. Free-electron Theory of conduction. Band Theory. Semiconductors. Dielectric and magnetic properties of solids. Lectures only.

PHYS C477 ***Quantum Mechanics I*** (3 credits)
Prerequisite: PHYS C364; PHYS C232 or PHYS C244. State functions and their interpretation, wave packet, linear momentum, motion of a free particle, Schroedinger's equation, stationary state, solution, potential wells. Lectures only.

PHYS C478 ***Quantum Mechanics II*** (3 credits)
Prerequisite: PHYS C477. The harmonic oscillator, creation operators, approximation methods of solving Schroedinger's equation, perturbation theory, system of particles, motion in three dimensions, spin, angular momentum, hydrogen atom. Lectures only.

PHYS C494 ***Experimental Thermodynamics I*** (1 credit)
Prerequisite: PHYS C434, previously or concurrently. A laboratory course in thermodynamics. Experiments include Clement and Desormes' experiment, vaporization, specific heats, liquid nitrogen boiling. Laboratory only, 10 experiments.

PHYS C495 ***Experimental Nuclear Physics I*** (1 credit)
Prerequisite: PHYS C394; PHYS C465, previously or concurrently. A laboratory course in nuclear

physics. Experiments include gamma- and beta-ray spectroscopy, nuclear magnetic resonance, absolute counting, half-life determination, nuclear activities. Laboratory only, 10 experiments.

PHYS C496 ***Methods of Experimental Physics*** (4 credits)
Prerequisite: PHYS C296 or equivalent; PHYS C394 or equivalent, or permission of the Department. Experiments include fundamentals of digital logic and applications of operational amplifiers, solid-state and nuclear physics. Students are encouraged to propose new experiments and will have the opportunity to design and build equipment. Laboratory only.

PHYS 498 ***Advanced Topics in Physics*** (3 credits)

PHYS 499 ***Advanced Topics in Physics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.240 Political Science

Chairman
H.P. HABIB, *Professor*

Professor
L.P. SINGH

Associate Professors
H. ANGELL
P. ARNOPOULOS
R.C. COYTE
M. DANIS
A.B. GOLLNER
K. HERMANN
H. HUTTER
A. KROKER
L. LASZLO
J.W. MOORE
E.M. PRICE
H. SHULMAN
B. WILLIAMS

Assistant Professor
H. CHORNEY

Lecturers
G. LACHAPELLE
D. SALEE

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours in Political Science
6 POLI C200[6]
6 Chosen from POLI C270[6], C271[3], C273[3]
6 Chosen from POLI C372[6] or C374[6]
42 Chosen from at least three of the five Groups in Political Science, with a minimum of 30 credits taken at the 300 or 400 level, 12 of which must be seminar courses.

6 credits may be taken in a cognate discipline with the permission of the Department.

60 BA Honours in Political Science (Concentration in a Special Field of Study)
18 POLI C200[6], C270[6] or C271[3], and C273[3], C372[6] or C374[6]
18 Chosen from at least three of the five Groups in Political Science
24 Chosen from one of the five Groups in Political Science with a minimum of 18 credits taken at the 400 level, 12 of which must be seminar courses.*

**6 credits may be taken in a cognate discipline with the permission of the Department.*

63 BA Joint Honours in Political Sociology
15 ANTH C202[3]; SOCI C203[3], C300[6], C333[3]
18 POLI C200[6], C270[6], C470[6]
12 Chosen from SOCI C402[3], C403[3], C406[3], C407[3]; POLI C370[6], C372[6] or C374[6]
12 Chosen from SOCI C280[6], C320[6], C330[6], C335[6], C353[3], C354[3]; POLI C230[6], C336[6], C351[6], C353[6], C360[6], C430[6]
6 Chosen from SOCI C409[6]*; POLI C438[6]

**On approval of the Honours Adviser, the prerequisites for SOCI C409 may be modified for students in this programme.*

60 BA Specialization in Political Science
6 POLI C200[6]
12 Chosen from Group V: Theory
42 Chosen from at least two of the other four Groups in Political Science. A minimum of 30 credits must be taken at the 300 or 400 level, 6 of which must be a seminar course.

6 credits may be taken in a cognate discipline with the permission of the Department.

42 BA Major in Political Science
6 POLI C200[6]
36 Chosen from at least three of the five Groups in Political Science. A minimum of 24 credits must be taken at the 300 or 400 level.

42 BA Major in Political Science (Concentration in one Group)
6 POLI C200[6]
24 Chosen from one of the five Groups in Political Science. A minimum of 18 credits must be at the 300 or 400 level.
6 Chosen from the other four Groups in Political Science at the 300 or 400 level.
6 Chosen from a cognate discipline (courses to be designated)

24 Minor in Political Science
6 POLI C200[6]
18 Chosen from any of the five Groups in Political Science. A minimum of 12 credits must be taken at the 300 or 400 level.

The Department of Political Science offers the following programmes of study: a General Honours; an Honours, with concentration in a special field of study; a Specialization; a General Major; a Major, with concentration in a Special field of study; and a Minor.

Additionally, in cooperation with the Department of Sociology and Anthropology, the Department offers an Honours programme in Political Sociology.

In order to maintain Honours status, students must obtain approval for their programmes from the Honours Adviser each year prior to registration. In the second year of the Honours programme, each student will choose

a faculty adviser to advise the student on course selection and seminar research essays.

Students who already had Honours status by June 1, 1977 will continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

The Specialization is designed for students who wish to acquire a broad knowledge of the discipline without the additional requirements of the Honours programme.

The programme of courses leading to a Minor in Political Science consists of 24 credits in the Department. The Minor is designed to provide an opportunity for students to make a combination with a Specialization, a Major, or Honours in another discipline. A student's Minor will be arranged in consultation with the Department of Political Science so that it relates to courses in the Major area of study.

Explanation of Course Numbers.

1. Courses in the 200 and 300 range are open to all Political Science students and students in other departments.
2. Courses in the 400 range are open to all students in Political Science who are in their second or third year. Students in other departments may take these courses with the permission of the Political Science Department.

Group 1: International

POLI C210 International Relations (6 credits)

POLI C311 International Public Law (3 credits)

POLI C313 International Law and Power Relations (3 credits)

POLI C315 International Organization (3 credits)

POLI C317 Regional Organizations (3 credits)

POLI C321 The Middle East in World Politics (3 credits)

POLI C323 Eastern Europe in World Politics (3 credits)

POLI C348 Latin America and the Caribbean in World Affairs (3 credits)

POLI C410 Seminar on Institutions of World Society (6 credits)

POLI C412 Foreign Policy and Diplomacy (6 credits)

POLI C415 International Justice (3 credits)

POLI C417 Peace Studies (3 credits)

POLI C419 Strategic Studies (3 credits)

POLI C421 Transnational Politics (3 credits)

POLI C425 Seminar on Macropolitics (6 credits)

POLI C451 Canadian External Affairs (3 credits)

Group 2: Comparative Politics

POLI C231 Governments of Western Europe (3 credits)

POLI C233 Political Parties and Political Groups in Western Europe (3 credits)

POLI C327 The Government of the United States (3 credits)

POLI C329 Political Parties and Groups in the U.S. (3 credits)

POLI C331 British Government and Politics (3 credits)

POLI C333 The Government and Politics of the Soviet Union (3 credits)

POLI C334 Women and the Law (6 credits)

POLI C335 Contemporary Politics of China (3 credits)

POLI C336 Urban Politics (6 credits)

POLI C337 Contemporary Politics of Japan (3 credits)

POLI C339 Mid-East Political Systems I (3 credits)

POLI C340 Political Systems of Southern Asia (3 credits)

POLI C341 Mid-East Political Systems II (3 credits)

POLI C342 Asia and Power Politics (3 credits)

POLI C343 West African Government and Politics (3 credits)

POLI C345 East African Government and Politics (3 credits)

POLI C346 Political Systems of Latin America and the Caribbean (3 credits)

POLI C430 Comparative Political Parties (6 credits)

POLI C432 Seminar on Western Political Systems (6 credits)

POLI C434 Seminar on Asian Political Systems (6 credits)

POLI C436 Seminar on Politics of East Europe (6 credits)

Group 3: Canadian

POLI C250 Canadian Government and Politics (6 credits)

POLI C334 Women and the Law (6 credits)

POLI C336 Urban Politics (6 credits)

POLI C350 Canadian Public Law (6 credits)

POLI C351 Canadian Federalism (3 credits)

POLI C353 Quebec Politics (3 credits)

POLI C355 Nationalism: The Canadian Experience (3 credits)

POLI C356 Canadian Political Parties (3 credits)

POLI C358 Interest Groups and Public Opinion in Canada (3 credits)

POLI C363 Issues in Canadian Public Policy (3 credits)

POLI C365 Canadian Public Administration (3 credits)

POLI C367 Quebec Public Administration (3 credits)

POLI C450 Seminar on Quebec Government and Politics (6 credits)

POLI C451 Canadian External Affairs (3 credits)

POLI C452 Intergovernmental Relations in Canada (6 credits)

POLI C453 The Provinces in Canadian Federalism (3 credits)

POLI C454 Seminar on Legislative, Executive, and Judicial Decision-Making (6 credits)

POLI C471 Political Thought and Ideology in Canada (3 credits)

Group 4: Public Policy and Administration

POLI C357 Social and Political Power in Canadian Society (3 credits)

POLI C360 Comparative Public Administration (6 credits)

POLI C361 Government, Society and the Public Purpose (3 credits)

POLI C363 Issues in Canadian Public Policy (3 credits)

POLI C365 Canadian Public Administration (3 credits)

POLI C367 Quebec Public Administration (3 credits)

POLI C369 Regionalism and Public Policy in Canada (3 credits)

POLI C381 Bureaucracy and Public Policy (3 credits)

POLI C412 Foreign Policy and Diplomacy (6 credits)

POLI C454 Seminar on Legislative, Executive, and Judicial Decision-Making (6 credits)

POLI C461 The State and Economic Life (3 credits)

POLI C462 Seminar on Comparative Public Policy (6 credits)

POLI C463 Government and Business in Canada (3 credits)

POLI C465 Analysis and Evaluation of Public Policy (3 credits)

Group 5: **Theory**

POLI C270 History of Political Theory (6 credits)

POLI C271 Ancient Greek Political Philosophy (3 credits)

POLI C273 Roman, Medieval, and Renaissance Political Philosophy (3 credits)

POLI C325 Ideas and Ideologies in the Middle East (3 credits)

POLI C370 Problems and Concepts in Political Theory (6 credits)

POLI C371 Early Modern Political Philosophy (3 credits)

POLI C372 Methodology of Political Science (6 credits)

POLI C373 Late Modern Political Philosophy (3 credits)

POLI C374 Introduction to Quantitative Political Inquiry (6 credits)

POLI C375 Nationalism: Origins, Operation, Significance (3 credits)

POLI C377 Catholic Social and Political Thought (3 credits)

POLI C470 Contemporary Political Thought (6 credits)

POLI C471 Political Thought and Ideology in Canada (3 credits)

POLI C472 Seminar on Communications and Politics (6 credits)

POLI C473 Seminar on Political Theory and Historical Understanding (3 credits)

POLI C474 Seminar on Political Theory and Scientific Method (6 credits)

POLI C475 Marxism (3 credits)

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

POLI C200 ***Introduction to Political Science*** (6 credits)
A description of the features universal to the governing processes of societies, and the nature and consequences of the major variations in these processes. The course combines a theoretical and conceptual framework, with a study of selected political systems and countries. It is designed to act both as an introduction to the discipline for those students who plan to study further and to serve also those students who require a systematic examination of the field in a single course.

POLI C210 ***International Relations*** (6 credits)
An introductory course in world affairs. Among the topics covered will be: the historical evolution of the international system; definitions of basic concepts; types of conflict and cooperation among states; environmental, economic, socio-cultural, and ideological factors; critical problems, current issues, and major trends in world politics.

POLI C231 ***Governments of Western Europe*** (3 credits)
A comparative study of the governmental framework and institutions of Western Europe with special reference to Great Britain, France, and West Germany.

POLI C233 ***Political Parties and Political Groups in Western Europe*** (3 credits)
A study of political dynamics, parties, interest groups and movements in selected countries with special reference to Great Britain, France and West Germany.

POLI C250 ***Canadian Government and Politics*** (6 credits)
An institutional and functional analysis of the Canadian federal system. The course centers upon the major problems of concern in the Canadian political process and considers the formal and informal institutions within which these problems might be solved. The political system is studied within the context of federalism; the electoral system; political parties; interest groups; public opinion and the Canadian political culture.

POLI C270 ***History of Political Theory*** (6 credits)
A general survey of the writings of the great thinkers in the western political tradition, from the classical period to the middle of the nineteenth century. This course provides a general introduction to the history of political thought.
NOTE: Students who have received credits for POLI C271 or C273 may not take this course for credit.

POLI C271 ***Ancient Greek Political Philosophy*** (3 credits)
A study of the political thought of the ancient Greeks. The principal texts to be studied are *The Republic of Plato* and *The Politics* of Aristotle. This course is particularly recommended for students in the political theory area of concentration.
NOTE: Students who have received credits for POLI C270 may not take this course for credit.

POLI C273 ***Roman, Medieval, and Renaissance Political Philosophy*** (3 credits)
A study of the political thought of Rome, the Middle Ages, and the Renaissance, with special emphasis upon the political writings of Cicero, St. Augustine, St. Thomas Aquinas, and Machiavelli. This course is recommended for students in the political theory area of concentration.
NOTE: Students who have received credits for POLI C270 may not take this course for credit.

POLI 298 ***Selected Topics in Political Science*** (3 credits)

POLI 299 ***Selected Topics in Political Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

POLI C311 ***International Public Law*** (3 credits)
An introductory course in legal inter-state relations. Among the topics covered will be: the sources and development of law; relationships with municipal law; meaning of legal concepts; rights and duties of states; sovereignty and territoriality; state recognition and succession.

POLI C313 ***International Law and Power Relations*** (3 credits)
A general course on the role of law in world politics. Among the topics covered will be: the theory and reality of law; international transactions and diplomatic law; customary and treaty law; judicial settlement of disputes; the laws of war and neutrality.

POLI C315 ***International Organizations*** (3 credits)
An introductory course in intergovernmental institutions. Among the topics covered will be: the development of international public unions; the League of Nations and the United Nations; the structure and function of international administration; specialized agencies and world order.

POLI C317 ***Regional Organizations*** (3 credits)
A general course in international structural integration. Among the topics covered will be: the dynamics of socio-political unification; theories of regionalism; supra-national communities and common markets. Emphasis will be given to institutions such as the EEC, COMECON, OAS, OAU, LAFTA, and ASEAN.

POLI C321 ***The Middle East in World Politics*** (3 credits)
A survey of major regional and international problems facing the Middle East. The role of foreign powers will be examined with special emphasis on the USA and USSR. Selected topics include the Arab-Israeli question, the Lebanese crises, the Cyprus crises, the Iranian Revolution and its impact on international affairs and the crisis of the Gulf, Horn of Africa and the Red Sea.

POLI C323 ***Eastern Europe in World Politics*** (3 credits)
This course will deal with the role of the Soviet Union and its East European allies in international affairs. Among the topics covered will be: the ideological foundations and historical development of socialist foreign policy; problems of domestic security, defense, international trade, foreign aid, and expansion of influence; the East European alliance system, CEMA, and the WTO (Warsaw Pact).

POLI C325 ***Ideas and Ideologies in the Middle East*** (3 credits)
A survey of contemporary major political, historical, socio-economic and religious ideologies and movements, which affect Middle Eastern political thought. Special attention is directed to Arab nationalism, Zionism, Turkish nationalism, the Islamic Revival in Iran, Socialism and Communism.

POLI C327 ***The Government of the United States*** (3 credits)
A study of the constitutional framework, the Presidency, the Congress, the judicial system and related aspects of U.S. government.

POLI C329 ***Political Parties and Groups in the U.S.*** (3 credits)
A study of the political parties, groups, public opinion, regulatory commissions, welfare policy, ethnic and racial issues, and foreign policy.

POLI C331 ***British Government and Politics*** (3 credits)
Government and politics in Britain, with particular emphasis on political parties and pressure groups, the changing role of the legislature and executive, and the Public Corporations. The issues of current constitutional interest will be discussed, such as the office of Prime Minister and Parliamentary sovereignty.

POLI C333 ***The Government and Politics of the Soviet Union*** (3 credits)
A study of the government and politics of the Soviet Union. Discussion of the basic theories of Communism and the evolution of the Soviet System.

POLI C334 ***Women and the Law*** (6 credits)
Prerequisite: POLI C200 or equivalent. An historical comparative study of the status of women as seen in different legal systems. The course will deal with women in relation to private, family, and public law. The framework will be primarily legal, but will also include a consideration of the social and political implications of women's legal status. Special attention to be directed to Quebec and Canadian law.

POLI C335 ***Contemporary Politics of China*** (3 credits)
An analysis of the political development of and change in China since the triumph of Communism in China, with special emphasis on the role of the CCP, mass mobilization and prospect, and influence on Asia and world politics.

POLI C336 ***Urban Politics*** (6 credits)
Prerequisite: POLI C200 or POLI C250. A course in the problems and prospects in urban politics, with special emphasis on the processes of the local community. This course, although dealing primarily with urban politics in Canada, will go beyond national boundaries for its comparative treatment.

POLI C337 ***Contemporary Politics of Japan*** (3 credits)
An analysis of the political change in and development of Japan since the end of World War II, with special emphasis on the reorientation of Japan, characteristics of Japanese modernization and of post-industrial politics, problems of national post-industrial politics, problems of national security and constitutional pacifism, and influence on Asia and world politics.

POLI C339 ***Mid-East Political Systems I*** (3 credits)
A comparative study of the government and politics of Arab North Africa, namely Egypt, Libya, Tunisia, Morocco, Algeria and the Sudan. A link between these and other Middle Eastern Governments will be made.

POLI C340 ***Political Systems of Southern Asia*** (3 credits)
A study of government and politics of South and Southeast Asia, with special reference to India, Pakistan, Indonesia and Vietnam.

POLI C341 ***Mid-East Political Systems II*** (3 credits)
A comparative study of the government and politics of the Arabian Peninsula, the states of Iraq, Syria, Lebanon, Jordan, Israel, Turkey and Iran. A link between these and the North African Arab states will be made.

POLI C342 ***Asia and Power Politics*** (3 credits)
A study of super powers' policies in Asia and the international relations of India, China, Japan, Indonesia and Vietnam.

POLI C343 ***West African Government and Politics*** (3 credits)
A study of political institutions and process in West Africa, with special reference to Nigeria, Ghana, Togo, Guinea, Cameroon and Angola.

POLI C345 ***East African Government and Politics*** (3 credits)
A study of political institutions and processes in East Africa with special reference to Zambia, Zimbabwe, Tanzania, Kenya and Mozambique.

POLI C346 ***Political Systems of Latin America and the Caribbean*** (3 credits)
A study of political change, reform and revolution, military rule, and the experiences of representative government in selected countries of South America, Central America and the Caribbean.

POLI C348 ***Latin America and the Caribbean in World Affairs*** (3 credits)
A study in inter-American relations, the dependency perspective, sub-regional integration, and international relations of selected states of the area.

POLI C350 ***Canadian Public Law*** (6 credits)
This course is an introduction to Canadian Public Law, emphasizing such areas as constitutional law, criminal law, administrative law, applications for bail, and consumer protection. In addition, the course will involve a study of the organization and functioning of the court system.
NOTE: Students who have received credit for MANA C211 may not take this course for credit.

POLI C351 ***Canadian Federalism*** (3 credits)
Prerequisite: POLI C250. A critical and analytical study of the theory of federal government and its application to the nature, principles, and techniques of federalism in Canada. The reaction of the Canadian federal system to the demands of cultural dualism and regional pressures. Some attention will also be given to the problems of provincial governments and Federal-Provincial relations.

POLI C353 ***Quebec Politics*** (3 credits)
Prerequisite: POLI C250. A study of the changing party structure and political issues in Quebec and their relationship to constitutional, cultural, and economic factors.

POLI C355 ***Nationalism: The Canadian Experience*** (3 credits)
Prerequisite: POLI C250, or permission of the Department. Examines the origins and development of nationalism and regionalism in Canada, with particular attention centered upon the interaction between French-Canadian and English-Canadian nationalist sentiments. Considers the similarities and divergencies of nationalist and regionalist sentiment in Canada with those of European nationalism, and evaluates their significance with regard to the development of the Canadian federation and its capacity to confront the realities and demands of the modern technological environment.

POLI C356 ***Canadian Political Parties*** (3 credits)
Prerequisite: POLI C250. A study of national political parties with emphasis on ideology, political organization, leadership and political recruitment.

POLI C357 ***Social and Political Power in Canadian Society*** (3 credits)
Prerequisite: POLI C250. An analysis of power and influence in Canadian society. The course will review theoretical approaches to the study of political power and influence leading to an examination of such key determinants of power as social class, elites, and economic structures in Canada.

POLI C358 ***Interest Groups and Public Opinion in Canada*** (3 credits)
Prerequisite: POLI C250. An examination of the function of interest groups, formulation and expression of public opinion, and its impact on public policy.

POLI C360 ***Comparative Public Administration*** (6 credits)
Concerned with the theories and maxims, as well as with the development of public administration. The student is introduced to issues such as the organization of governmental departments, budget policy, decision-making in government administration, personnel selection and training methods, as well as the application of efficiency ratings. There is, throughout, strong emphasis on attitudes and differences pertinent to the civil service in a selected group of countries.

POLI C361 ***Government, Society and the Public Purpose*** (3 credits)
An examination of the broad social, economic, political and cultural forces shaping governmental decisions and policies. Particular attention will be paid to the conflict between private and public concerns.

POLI C363 ***Issues in Canadian Public Policy*** (3 credits)
The course will examine alternative public policies in selected areas at the federal, provincial, and municipal levels in Canada, leading towards the development of individual research projects. Policies analyzed will vary from year to year and will include such areas as: social welfare policy, culture, education, and language policy; environmental protection, energy conservation, urban renewal, economic policy.

POLI C365 ***Canadian Public Administration*** (3 credits)
Prerequisite: POLI C250, or permission of the Department. This course will examine the organization and composition of the federal bureaucracy, the role of the bureaucracy in the making and execution of public policy, patterns of recruitment, and the mechanisms of accountability to, and control over the behaviour of, these bodies.

POLI C367 ***Quebec Public Administration*** (3 credits)
Prerequisite: POLI C250, or permission of the Department. This course will examine the organization and composition of the provincial bureaucracy, the role of Quebec civil servants in the making and execution of public policy, patterns of recruitment, and the mechanisms of accountability to, and control over the behaviour of, these bodies.

POLI C369 ***Regionalism and Public Policy in Canada*** (3 credits)
Prerequisite: POLI C250. An examination of the impact of regionalism on public policy in Canada with special emphasis on the problems of regional disparity and conflict. An historical analysis of national development policies and regional underdevelopment leads to a study of federal-provincial development strategies, and an assessment of alternative policies for the alleviation/elimination of regional disparities.

POLI C370 ***Problems and Concepts in Political Theory*** (6 credits)
Prerequisite: POLI C270, or POLI C271; POLI C273. A course in political theory that examines central concepts in political thinking, such as liberty, equality, and power. The content of the course will include basic methodology and terminology to the extent that the thematic orientation in any given year may require its inclusion.

POLI C371 ***Early Modern Political Philosophy*** (3 credits)
The Reformation and rise of modern individualism. The principal political thinkers studied in this period will be Luther, Calvin, Bellarmine, Bodin, Hobbes, Harrington, Locke.

POLI C372 ***Methodology of Political Science*** (6 credits)
A study of the contemporary subject matter and methods of political science. The course deals with: 1) fundamental concepts, principles, institutions, and processes of politics; 2) methods and techniques of the study of Politics, including an introduction to statistical analysis; 3) present approaches, such as functionalism, behaviourism, and practical laboratory periods.

POLI C373 ***Late Modern Political Philosophy*** (3 credits)
The Enlightenment and its critics, and the political thought of the early industrial period. The most important thinkers to be studied in this period are: de Montesquieu, Hume, Rousseau, Burke, J.S. Mill, and Marx.

POLI C374 ***Introduction to Quantitative Political Inquiry*** (6 credits)
A study of the logic and methodology of Political Science research. Special attention will be paid to the formulation of hypotheses and research design; the study of quantitative methods of data collection and analysis; and, the introduction of SPSS (Statistical Package for Social Sciences).

POLI C375 ***Nationalism: Origins, Operation, Significance*** (3 credits)
Examines the foundations of nationalist ideology developed originally in the early nineteenth century as a purely European phenomenon. Considers specific nationalist ideologies - European, African, Asian, etc., with regard to their modality of operation, and their significance in relation to a society's capacity to evolve and confront the demands, both internal and external, of the contemporary environment.

POLI C377 ***Catholic Social and Political Thought*** (3 credits)
An inquiry into contemporary Catholic social and political thought as stated in papal encyclicals; a broad survey of Catholic political activity as manifested in the European and Latin-American Christian Socialist and Christian Democratic movements and parties.

POLI C381 ***Bureaucracy and Public Policy*** (3 credits)
Prerequisite: POLI C365 or POLI C367. An examination of the expanding role of the federal or provincial bureaucracy in the development and implementation of public policy in Canada. Particular attention is devoted to the sources of increasing bureaucratic power and to the patterns of interaction among the cabinet, parliament and the bureaucracy.

POLI 398 ***Selected Topics in Political Science*** (3 credits)

POLI 399 ***Selected Topics in Political Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

POLI C410 ***Seminar on Institutions of World Society*** (6 credits)
Prerequisite: At least 6 credits in International Relations. An advanced study of the institutions of contemporary international society. The discussions will emphasize constitutional and structural aspects of universal and regional inter-governmental organizations, institutions of diplomacy and international law, supranational communities and transnational corporations.

POLI C412 ***Foreign Policy and Diplomacy*** (6 credits)
Prerequisite: 3 credits in International Affairs. A specialized course on the substance, formulation and implementation of foreign policy in selected countries. Special attention will be paid to theoretical frameworks, inputs in decision making, policy evaluation, diplomatic establishments, diplomatic negotiation, treaty making, and conference diplomacy.
NOTE: Students who have received credit for POLI C411, C413 may not take this course for credit.

POLI C415 ***International Justice*** (3 credits)
Prerequisite: At least 3 credits in International Affairs. A specialized course on the role of morality in world affairs. Among the topics covered will be: Human Rights and collective values; individual obligation and state responsibility; relativistic ethics and universal standards; natural law and equity; international stratification and inequality; international courts of justice and the legitimation of world order.

POLI C417 ***Peace Studies*** (3 credits)
Prerequisite: At least 3 credits in International Affairs. A specialized course on the theory and practice of world peace. Among the topics covered will be: the causes of war and the conditions of peace; human aggression and the peace movement; structural violence and revolution; nationalism and cosmopolitanism; disarmament and peacekeeping.

POLI C419 ***Strategic Studies*** (3 credits)
Prerequisite: At least 3 credits in International Affairs. A specialized course in power politics and defence policy. Among the topics covered will be: balance of power and collective security; military alliances and spheres of influence; the East-West cold war and détente; theories of geopolitics and imperialism; nuclear weapons and the arms race; deterrence and game theory.

POLI C421 ***Transnational Politics*** (3 credits)
Prerequisite: At least 3 credits in International Affairs. A specialized course in international socio-economic relations. Among the topics covered will be: the North-South confrontation and the New International Economic Order; multi-national corporations and non-governmental organizations; the Third World and the politics of development; economic interdependence and self-reliance; political influence of trade, aid, and investment; natural resources and the limits to growth.

POLI C425 ***Seminar on Macropolitics*** (6 credits)
Prerequisite: 6 credits in courses of Group 1. An advanced study of conflict-resolution and policy making processes of international systems. The seminar will centre on processes and dynamics of international systems. Specific topics may include such subjects as relations of super powers with regional powers, East-West and North-South confrontations, or the impact of technology on international politics.

POLI C430 ***Comparative Political Parties*** (6 credits)
A study of the history, ideology, and organization of a selected number of countries representing different political systems.

POLI C432 ***Seminar on Western Political Systems*** (6 credits)
A seminar on the political systems of western Europe and North America.

POLI C434 ***Seminar on Asian Political Systems*** (6 credits)
A discussion of selected themes - nationalism, communism, process of modernization and/or Asian political institutions, political forces and foreign policies. The topics may vary from year to year depending upon the interests of the instructor.

POLI C436 ***Seminar on Politics of East Europe*** (6 credits)
A study of selected problems of government in the Soviet Union and Eastern Europe.

POLI C450 ***Seminar on Quebec Government and Politics*** (6 credits)
Prerequisite: POLI C250 or POLI C353. An institutional and functional survey of the executive, legislative, judicial, and administrative branches of the Quebec government. A detailed study of Quebec's jurisdictional and fiscal problems with the federal government. Discussion on the political process in Quebec; the electoral system, political parties, pressure groups, and public opinion. The role of the Catholic Church in Quebec politics. A study of the most important thinkers in French Canada.

POLI C451 ***Canadian External Affairs*** (3 credits)
Prerequisite: POLI C210 or POLI C250. This course will study Canada's position in the world. The presentation will include an outline of the diplomatic history of Canada, as well as an analysis of its foreign and defence policies. Emphasis will be given to the decision-making process by which policy is formulated and executed, with particular reference to Canadian relations vis-à-vis the United States, the Commonwealth, and the United Nations.

POLI C452 ***Intergovernmental Relations in Canada*** (6 credits)
Prerequisite: POLI C250. An examination of the structure and process of relations among the federal, provincial and municipal levels of government. Particular attention is on the development and administration of shared programmes and the problems of intergovernmental cooperation.

POLI C453 ***The Provinces in Canadian Federalism*** (3 credits)
Prerequisite: POLI C250. An analysis of regional political cultures in Canada; the development of provincial parties and public administrations; the rise of third parties; electoral behaviour and provincial public opinion.

POLI C454 ***Seminar on Legislative, Executive, and Judicial Decision-Making*** (6 credits)
Prerequisite: POLI C250. An examination of formation of decisions in the legislative, executive, and judicial branches of government, using Canada as the model.

POLI C461 ***The State and Economic Life*** (3 credits)
Prerequisite: POLI C250 or POLI C361. An examination of the development of the welfare state and the forces contributing to the expansion of government intervention in the economy. Particular attention is devoted to the causal interdependence among values, political power, wealth, the general pattern of social stratification, and economic development.
NOTE: Students who have received credit for POLI C460 may not take this course for credit.

POLI C462 ***Seminar on Comparative Public Policy*** (6 credits)
Prerequisite: POLI C361; POLI C363. A comparative analysis of some of the major policy problems confronting industrially advanced societies. The aim is to understand how similar problems are approached by different political systems.

POLI C463 ***Government and Business in Canada*** (3 credits)
Prerequisite: POLI C250 or POLI C361. A course in public policy designed to explore the relationship between government and business in Canada. Particular attention will be given to the formation and implementation of policies intended to promote and control enterprise and the role of government as entrepreneur.
NOTE: Students who have received credit for POLI C460 may not take this course for credit.

POLI C465 ***Analysis and Evaluation of Public Policy*** (3 credits)
Prerequisite: POLI C361. An advanced study of the various theoretical approaches to policy planning, evaluation and analysis and of the various conceptual, methodological and ethical issues emergent in the evaluation of governmental policy performance.

POLI C470 ***Contemporary Political Thought*** (6 credits)
Prerequisite: POLI C270 or POLI C271; POLI C273 or POLI C371; POLI C373. A study of the most important political thinkers and the main currents of political thought in the past century.

POLI C471 ***Political Thought and Ideology in Canada*** (3 credits)
A study of the writings of the most significant political and social thinkers in Canada, and of the main ideological orientations in Canadian politics.

POLI C472 ***Seminar on Communications and Politics*** (6 credits)
Prerequisite: Permission of the Department. This course will include communication and national unity, communications and social mobilization, politics and the mass media, the use of political symbols, communication, and authority, and the "Canadian School" of culture and communications, based on the ideas of Harold Innis.

POLI C473 ***Seminar on Political Theory and Historical Understanding*** (3 credits)
Prerequisite: POLI C270; or POLI C271; POLI C273; or POLI C371; POLI C373. An advanced seminar on the relation between historical understanding and political thought.

POLI C474 ***Seminar on Political Theory and Scientific Method*** (6 credits)
Prerequisite: POLI C270; or POLI C271; POLI C273; or POLI C371; POLI C373. An advanced seminar on the problems of applying scientific method in the study of politics.

POLI C475 ***Marxism*** (3 credits)
Prerequisite: POLI C270; or POLI C271; POLI C273; or POLI C371; POLI C373. A critical examination of the major texts of Marx and Engels, and a study of representative selections of Marxist thinkers chosen from among the following: Kautsky, Plekhanov, Lenin, Luxemburg, Trotsky, Stalin, Lukacs, Gramsci, Althusser, Mao.

POLI 498 ***Advanced Topics in Political Science*** (3 credits)

POLI 499 ***Advanced Topics in Political Science*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.250 Psychology

Chairman
T. ARBUCKLE-MAAG, *Professor*

Professors
Z. AMIT
E. BRUSSELL
D. GOLD
H. LADD
C. PERRY
A. SCHWARTZMAN
L. SERBIN
P. SHIZGAL
J. STEWART
R.A. WISE

Associate Professors
D. ANDRES
P. BABARIK
J.H. BAUER
W. BRENDER
G. BRETON
M. BROSS
J.S. CHAIKELSON
A.B. DOYLE
T. GRAY
A. HILTON
W.R. HOOPER
D. KALOUPEK
M.K. KOMODA
R.M. LAMBERT
R.D. SEENS
N. SEGALOWITZ
P. SERAGANIAN
M.L. SHAMES
N. TAYLOR
C. WHITE
D. WHITE
B. WOODSIDE

Associate Professor of Applied Social Science and Psychology
D. MARKIEWICZ

Assistant Professors
S. AZAR
J. BARIBEAU
E. HENRIK
E. MOULEDOUX

Lecturer
M. CONWAY

Adjunct Associate Professors
A. PAPAGEORGIOU
D. POMERANTZ
V. QUINSEY
R. QUIRION
A. SUTHERLAND

Adjunct Assistant Professors
C. ARAGON
C. BERGER
C. BRAUN
S. BURSTEIN
H. FRANK
E. LIBMAN
G. NEMETH
A. PUTTERMAN
D. SINYOR

University Research Fellows
M. BOZARTH
J.-R. LAURENCE
P.-P. ROMPRE

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

Students must apply to the Departmental Honours Adviser for formal admission to Honours Programmes. The application is usually made after completion of the first-year courses.

Students who already had Honours status by June 1, 1977 will continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

For additional information concerning programmes and courses, students should consult the course guide published annually by the Department.

66 BA Honours in Psychology
Stage I
6 PSYC C310^{3}, C311^{3}
3 PSYC C315^{3} concurrently with C310^{3}
3 PSYC C316^{3} concurrently with C311^{3}
6 PSYC C320^{6}
Stages II and III
6 PSYC C345^{6} or C348^{6} or C351^{6}
6 PSYC C357^{6} or C360^{6} or C363^{6} or C366^{6}
12 Chosen from PSYC C330^{6}, C333^{6}, C336^{6}, C339^{6}, C342^{6}
12 Department-approved Psychology electives at '300' or '400' level
Stage III
6 PSYC C420^{6}
6 PSYC C430^{6}

66 BSc Honours in Psychology
Stage I
6 PSYC C310^{3}, C315^{3} concurrently
6 PSYC C311^{3}, C316^{3} concurrently
Stages I and II
6 PSYC C320^{6}
12 Chosen from PSYC C357^{6}, C360^{6}, C363^{6}, C366^{6}, C369^{3}, C381^{3}, C384^{3}

Stages II and III
6 Chosen from PSYC C345[6], C348[6], C351[6]
6 Chosen from PSYC C330[6], C333[6], C336[6], C339[6], C342[6]
12 Psychology electives at '300' or '400' level selected in consultation with a psychology programme adviser
Stage III
6 PSYC C420[6]
6 PSYC C430[6]
NOTE: In addition students must take a minimum of 15 science credits outside the department selected in consultation with the Psychology programme adviser.

Psychobiology Option
Students wishing to do BSc Honours (Psychobiology Option) must take PSYC C357 or C360 as part of their Psychology programme.
To complete the option students will select 21 credits in Chemistry and Biology from the courses listed below. Fifteen of these credits will replace the 15 outside credits of science electives and up to 6 of these credits may be substituted for 6 credits of Psychology electives.
Stage I
6 CHEM C221[3] and C222[3]
Stages I and II
6 BIOL C230[3] and CHEM C271[3]
Stages II and III
9 Chosen from BIOL C260[3], C321[3], C333[6], C335[3], C336[3], C363[3], C364[3], C365[3], C462[3], CHEM C475[3], C476[3]

60 BA Specialization in Psychology
Stage I
6 PSYC C310[3], C311[3]
3 PSYC C315[3] concurrently with C310[3]
3 PSYC C316[3] concurrently with C311[3]
6 PSYC C320[6]
Stages II and III
6 PSYC C345[6] or C348[6] or C351[6]
6 PSYC C357[6] or C360[6] or C363[6] or C366[6]
12 Chosen from PSYC C330[6], C333[6], C336[6], C339[6], C342[6]
18 Department-approved Psychology electives at '300' or '400' level.

60 BSc Specialization in Psychology
Stage I
6 PSYC C310[3] and 315[3] concurrently
6 PSYC C311[3] and C316[3] concurrently
Stages I and II
6 PSYC C320[6]
12 Chosen from PSYC C357[6], C360[6], C363[6], C366[6], C369[3], C381[3], C384[3]
Stages II and III
6 Chosen from PSYC C345[6], C348[6], C351[6]
6 Chosen from PSYC C330[6], C333[6], C336[6], C339[6], C342[6]
18 Psychology electives at the '300' and '400' level selected in consultation with the Psychology programme adviser.
In addition students must take a minimum of 15 science credits outside the department selected in consultation with the Psychology programme adviser.

Psychobiology Option
Students wishing to do BSc Specialization (Psychobiology Option) must take PSYC C357 or C360 as part of their Psychology programme.
To complete the option students will select 21 credits in Chemistry and Biology from the courses listed below. Fifteen of these credits will replace the 15 outside credits of science electives and up to 6 of these credits may be substituted for 6 credits of Psychology electives.
Stage I
6 CHEM C221[3] and C222[3]
Stages I and II
6 BIOL C230[3] and CHEM C271[3]
Stages II and III
9 Chosen from BIOL C260[3], C321[3], C333[6], C335[3], C336[3], C363[3], C364[3], C365[3], C462[3], CHEM C475[3], C476[3]

42 BA Major in Psychology
Stage I
6 PSYC C310[3], C315[3] concurrently
6 PSYC C320[6]
Stage II
A total of 18 credits to be taken from the following two sets of courses:
6-12 Chosen from PSYC C345[6], C348[6], C351[6], C357[6], C360[6] (or C363[6]), C366[6]
6-12 Chosen from PSYC C330[6], C333[6], C336[6], C339[6], C342[6]
12 Department-approved Psychology electives at 300- or 400-level

42 BSc Major in Psychology
Stage I
6 PSYC C310[3], C315[3] concurrently
6 PSYC C320[6]
Stage II
6 Chosen from PSYC C357[6] or C360[6] or C363[6]
12 Chosen from PSYC C342[6], C345[6], C348[6], C351[6], C366[6], C381[3], C384[3]
12 Department-approved Psychology electives at 300- or 400-level

30 Minor in Psychology
Stage I
3 PSYC C310[3]
3 PSYC C315[3] concurrently with C310[3]
6 PSYC C320[6]
Stages II and III
12 Chosen from PSYC C330[6], C333[6], C336[6], C339[6], C342[6], C345[6], C348[6], C351[6], C357[6], C366[6]
6 Department-approved Psychology electives at 300- or 400-level

NOTE: Students in programmes leading to the B.Sc. degree are reminded that PSYC C320 and PSYC C390-394 do not count as Science credits. All other '300' and '400' level Psychology courses count as Science credits.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

PSYC C200 ***Introductory Psychology*** (6 credits)
This comprehensive survey course will introduce the student to the phenomena and terminology encountered in a number of areas of scientific psychology. Topics covered include basic mechanisms of the receptors and nervous system, memory, motivation, perception, learning, abnormal psychology, personality, cognition, and social aspects of behaviour.
NOTE 1: Students who have credit for PSYC C200 or equivalent may not take MANA C213 for credit.
NOTE 2: Students who have credit for or exemption from Introductory Psychology at CEGEP or elsewhere may not take this course for credit.

PSYC C280 ***Adolescence*** (3 credits)
Prerequisite: Introductory Psychology or equivalent. This course will deal with various aspects of adolescence including such topics as physical change, sexual and sex-related behaviours, cognitive growth and lifestyles.
NOTE: This course is intended for students not enrolled in psychology programmes. Students who have credit for PSYC C379 or C391 may not take this course for credit.

PSYC C281 ***Learning Disabilities*** (3 credits)
Prerequisite: Introductory Psychology or equivalent. This course will deal with selected aspects of theory and practice related to learning disabilities including perceptual and motor disabilities, language disabilities and methods of diagnosis and remediation.
NOTE: This course is intended for students not enrolled in psychology programmes. Students who have credit for PSYC C377 or C392 may not take this course for credit.

PSYC C283 ***Emotional Development*** (3 credits)
Prerequisite: Introductory Psychology or equivalent. This course focuses on emotional development in childhood. Topics that may be considered include prenatal and genetic influences on emotion, attachment formation, effects of alternative child care, role of father and poverty. The normal development of anxiety, fear and affection will be discussed.
NOTE: This course is intended primarily for students in the Family Life Education Certificate programme (Department of Applied Social Science).
NOTE: Students who have credit for PSYC C220, Sec. A or B (1980-81); Sec. B (1981-82); or Sec. A (1982-83) may not take this course for credit.

PSYC C284 ***Socialization*** (3 credits)
Prerequisite: Introductory Psychology or equivalent. This course examines socialization processes during infancy, childhood and adolescence. The effects on socialization of factors such as family structure, disciplinary techniques and social class will be considered. The development of social skills, morality, prosocial behaviour and agression will be examined.
NOTE: This course is intended primarily for students in the Family Life Education Certificate programme (Department of Applied Social Science.)
NOTE: Students who have credit for PSYC C221, Sec. B or C (1980-81); Sec. A (1981-82); or Sec. A (1982-83) may not take this course for credit.

PSYC C286 ***Psychology of Leisure*** (3 credits)
Prerequisite: Introductory Psychology or equivalent. This course explores the rapidly developing psychologically oriented theory and research on leisure and its meaning and importance for the individual. Topics that may be considered include motivation for leisure activities, planning for leisure and/or retirement, therapeutic value of leisure, new conceptions of work and leisure, leisure and self-development.
NOTE: Students who have credit for PSYC C222, Sec. 60 (1981), Sec. 02 (1981-82) or for Sec. 51 (1982-83), or for PSYC C223, Sec. 60 (1982) may not take this course for credit.

SELECTED TOPICS IN PSYCHOLOGY

The '200' level Selected Topics Courses (PSYC 297; PSYC 298; PSYC 299) are designed as elective courses for students who are not registered in a psychology programme. These courses, which have only Introductory Psychology (usually CEGEP 102 or PSYC C200) or equivalent as a prerequisite, cover a wide variety of areas of contemporary interest. The particular topics will vary from session to session and the material will be dealt with in a manner appropriate for students who have minimal formal background in psychology. Students registered in a Psychology programme will not normally register for these courses. Students should consult the Psychology Department Course Guide (published yearly) to find out the topic titles for a particular session.

The department also offers '300' and '400' level topic courses for students registered in Psychology programmes. (See below).

PSYC 297 ***Selected Topics in Psychology*** (3 credits)

PSYC 298 ***Selected Topics in Psychology*** (3 credits)

PSYC 299 ***Selected Topics in Psychology*** (6 credits)

PSYC C310 ***Research Methods in Experimental Psychology I*** (3 credits)
Prerequisite: Introductory Psychology or equivalent; PSYC C315 to be taken concurrently. An examination of the experimental method in psychology. Students will complete experimental projects to acquaint themselves with procedures in various areas of psychology, such as perception, learning, and motivation. Statistical procedures for analysis of the results of the experiments will be presented in the concurrently taught course in psychological statistics. Lectures and laboratory.

PSYC C311 ***Research Methods in Experimental Psychology II*** (3 credits)
Prerequisite: PSYC C310; PSYC C315. PSYC C316 to be taken concurrently. This course will build on the experience gained in PSYC C310 and C315. It will be devoted to a critical examination of more complex designs used in psychology. Students will be required to conduct and evaluate experiments. An opportunity will be provided for them to undertake a supervised research project.

PSYC C312 ***Field Research Methodology*** (3 credits)
Prerequisite: PSYC C310; PSYC C315. This course will deal with techniques for studying complex behaviour in non-laboratory settings. Topics such as the neutrality or invisibility of the observers, participant observation, categorization, and recording problems may be studied. The relationship between laboratory findings and findings from the non-laboratory setting will be considered.

PSYC C315 ***Statistical Analysis in Experimental Psychology I*** (3 credits)
Prerequisite: Three approved credits in Mathematics at CEGEP or university; PSYC C310 to be taken concurrently. This course is an introduction to statistics, presented in an experimental psychology context. Topics dealt with include frequency distributions, measures of central tendency and dispersion, the normal curve, correlation, elementary probability theory, an introduction to hypothesis testing, and the *t* test. These topics are coordinated with the laboratory projects in Research Methods I which must be taken concurrently. *NOTE See §200.7*

PSYC C316 ***Statistical Analysis in Experimental Psychology II*** (3 credits)
Prerequisite: PSYC C310; PSYC C315. This course builds on the experience derived from PSYC C310 and C315 to advance the student's understanding of hypothesis testing and statistical inferences. The material dealt with will include non-parametric statistics, the chi-square and F-distribution, introductory analysis of variance, and various correlational techniques. *NOTE See §200.7*

PSYC C317 ***Introductory Statistical Methods in Psychology*** (6 credits)
Prerequisite: Any two CEGEP courses in Mathematics. Topics dealt with include frequency distributions, measures of central tendency and dispersion, correlation and regression, elementary probability theory, the binomial and normal distributions, sampling and statistical inference, simple analysis of variance, miscellaneous non-parametric techniques. Lectures and laboratory. Only 6 credits will be recognized from PSYC C315, C316, or C317. *NOTE See §200.7*

PSYC C318 ***Advanced Statistical Methods in Psychology*** (6 credits)
Prerequisite: PSYC C315; PSYC C316, or PSYC C317 or equivalent. The course is intended for students who already possess some background in statistics. Knowledge of elementary descriptive and inferential statistics will be assumed. The course will cover topics such as advanced analysis of variance designs, introductory multivariate analysis, advanced topics in correlation, and regression.

PSYC C320 ***Modern Psychology in Historical Perspective*** (6 credits)
Prerequisite: Introductory Psychology or equivalent. The course deals with the historical background of psychology from ancient and medieval times up to the present. Early contributions to psychology from the fields of philosophy, physics, physiology, and psychophysics are presented and related to the various schools of psychological thought from the late nineteenth century to the modern era.

PSYC C330 ***Developmental Psychology*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. Basic findings and contemporary issues concerned with human cognition, social and emotional development are considered. The course deals with a variety of topics such as the behavioural organization and competence of the new-born, relationships in the pre-school period, effects of different early environments, Piaget's theory of cognitive development.

PSYC C333 ***Social Psychology*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. The behaviour of the individual as a member of a larger grouping or society will be dealt with. The study of the social influences on individuals or groups will involve consideration of topics such as attitude change and development, intragroup communication and problem solving, leadership, prejudice, development of social movements, and cults.

PSYC C336 ***Personality: Normal and Abnormal*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. The organization, functioning, and development of personality will be discussed according to major theories of personality. Evidence from experimental studies and field findings are discussed. Socio-economic, cultural, and biological system factors may also be considered.

PSYC C339 ***Behaviour Disorders*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. The course will deal with contemporary research and theory related to the aetiology, diagnosis, and treatment of various psychological disorders. Psychoneuroses, psychoses, and psychosomatic conditions will be studied. Social, learning, and biological influences on the development of such disorders as schizophrenia, depression, anxiety neuroses, and phobias will be discussed.

PSYC C342 ***Motivation*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. Contemporary theory and empirical research concerned with factors related to the initiation and maintenance of goal-directed behaviour will be reviewed and evaluated. Research findings from human and sub-human studies in such areas as hunger, sleep, sex, agression, cooperation, and competition may be presented and evaluated.

PSYC C345 ***Learning*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. Current theories and research findings concerning the basic mechanisms of learning are considered. The current status of the Pavlovian and instrumental conditioning paradigms will be reviewed from behavioural and cognitive viewpoints. Topics such as the mechanisms of reinforcement, cognitive versus associative theories of conditioning, memory, and control of autonomic nervous system responses will be dealt with.

PSYC C348 ***Sensory and Perceptual Processes*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. Physiological and psychological bases of sensory and perceptual phenomena will be discussed. Topics such as pitch perception, colour vision, perception of movement, size, and distance are included. The areas of sensation and perception are integrated through a human information-processing approach to the understanding of auditory and visual phenomena.

PSYC C351 ***Cognitive Processes*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. The course will involve a study of the processes involved in thought and language. Possible topics for discussion are: cognitive development, psycholinguistics, pattern recognition, organization and memory, attention, problem solving and concept formation, and creativity.

PSYC C354 ***Mathematical Theories of Behaviour*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. The course will survey applications of mathematical techniques to problems of psychology in such areas as motivation, learning, decision making, sensory psychophysics, and perception. Students enrolling in this course should have a mastery of elementary probability theory and should be confident of their ability to deal with elementary calculus, algebra, and logic.

PSYC C357 ***Physiological Psychology*** (6 credits)
Prerequisite: PSYC C310; PSYC C315, or 9 credits in CEGEP-level Chemistry and Biology courses or permission of the Department. This course deals with current theory and research concerning the neural and humoral bases of behaviour. The biological bases of behaviour will be clarified through study of such topics as the function of nerve cells and circuits, brain-hormone interactions, physiological mechanisms of sensation, perception, memory, and coordinated movement.

PSYC C360 ***Brain Chemistry and Behaviour*** (6 credits)
Prerequisite: PSYC C310; PSYC C315, or 9 credits in CEGEP-level Chemistry and Biology courses or permission of the Department. Neural systems will be classified in terms of their different chemical transmitter substances. The mechanisms of hunger, thirst, pain, reward, drug abuse, and the neurochemical basis of disorders such as schizophrenia, depression, and Huntingdon's Chorea may be discussed. Methods for the identification and selective stimulation and destruction of the various systems are included.

PSYC C361 ***Psychology of Drug Dependence*** (3 credits)
Prerequisite: PSYC C310; PSYC C315, or 6 credits from among PSYC C357, PSYC C360 or PSYC C363, or permission of the Department. This course will focus on the behavioural and pharmacological mechanisms underlying the phenomenon of drug dependence. Concepts such as physical and psychological dependence, tolerance, reinforcement and aversion will be discussed. In addition the role of these concepts in the development of new treatment procedures will be assessed.

PSYC C363 ***Neuroanatomical Bases of Behaviour*** (6 credits)
Prerequisite: PSYC C310; PSYC C315, or 9 credits in CEGEP-level Chemistry and Biology courses or permission of the Department. Major emphasis is given towards gaining a knowledge of the structural anatomy and functions of the human central nervous system. Neurological mechanisms subserving human motives, emotions, language, visual-spatial perceptions, etc., will be examined. Research related to both animal and human neuropathology will be considered.

PSYC C364 ***Introduction to Behavioural Medicine*** (6 credits)
Prerequisite: PSYC C310; PSYC C315 or 6 credits from among PSYC C357, C360 or C363. This course surveys some of the areas dealt with by psychologists who conduct research or provide clinical services relating to physical health. The structure of the course reflects the growing recognition that psychological factors can be of major importance for both the development and eventual treatment of physical disorders. The course will introduce students to the history and basic concepts of the field and will cover psychological aspects of the etiology and treatment of such problems as pain and headache, substance abuse, anxiety and stress, cardiovascular disorders, sexual dysfunction. In discussing treatment emphasis will be placed on psychologically-based procedures, though somatic interventions (e.g. medication, diet and surgery) will also be reviewed at a level appropriate to the non-medical nature of the course.

PSYC C366 ***Animal Behaviour*** (6 credits)
Prerequisite: PSYC C310; PSYC C315, or 9 credits in CEGEP-level Chemistry and Biology courses or permission of the Department. The study of animal behaviour will be approached from the point of view of sociobiology, ethology, and comparative psychology. Research findings from the experimental laboratory and from studies of animals in their natural environment will be discussed. A study of genetic and evolutionary aspects of behaviour is intrinsic to the course.

PSYC C369 ***Hormones and Behaviour*** (3 credits)
Prerequisite: PSYC C310; PSYC C315. The course deals with the role of hormones in integrating the activity of various neural, endocrine, and sensory systems to bring about organized, purposeful behaviour. Topics discussed include the reproductive, sexual, or environmentally adaptive systems, with treatment of material ranging from the molecular to the behavioural level.

PSYC C372 ***Psychology of Physical Activity*** (6 credits)
Prerequisite: PSYC C310; PSYC C315 or permission of the Department. The relationship between physical and psychological well-being is systematically explored. Topics that may be dealt with include philosophical roots of the mind - body problem, the structural and metabolic basis of both emotional expression and physical activity, the role of aerobic fitness level in altering emotional reaction patterns.

PSYC C375 ***Industrial and Organizational Psychology*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. A systematic examination of current research and theory about human behaviour as it occurs in the context of work organizations. Possible topics are: motivation to work, communication in organizations, career development, and systems approach to conceptualizing the social psychology of organizations.

PSYC C377 ***Abnormal Development*** (3 credits)
Prerequisite: PSYC C310; PSYC C315; 6 credits from among PSYC C330, PSYC C336, PSYC C339 previously or concurrently, or permission of the Department. This course will cover major theoretical and applied issues in abnormal child development. Topics covered may include gender and sex-role-related problems, anxiety and fear-related problems, conduct disorders and delinquency, childhood anorexia and obesity, hyperactivity and attentional disorders, learning and school-related problems, mental retardation, and childhood psychosis.

PSYC C378 ***Learning in the Classroom*** (6 credits)
Prerequisite: PSYC C310; PSYC C315. A systematic examination of psychological principles and research reports that contribute to an understanding of learning in the school.

PSYC C379 ***Adolescent Development*** (3 credits)
Prerequisite: PSYC C310; PSYC C315; 6 credits from among PSYC C330, PSYC C336, PSYC C342 or PSYC C351 previously or concurrently. This course examines the physical, cognitive and motivational changes in puberty and early adolescence, their underlying mechanisms, interrelations and behavioural effects. Topics that may be covered include effects of early and late pubertal onset, parent and peer relations, sex differences and sex roles, and identity issues.

PSYC C380 ***Psychology of Aging*** (3 credits)
Prerequisite: PSYC C310; PSYC C315; 6 credits from among PSYC C330, PSYC C333, PSYC C336, PSYC C342 or PSYC C351 previously or concurrently. This course examines psychological development during the later phases of life. The material covered includes methodological issues in the study of aging as well as research findings in such areas as adjustment and well-being, coping styles and stress, age-related changes in memory and learning, the impact of social and family variables on aging, and health and medical issues related to the elderly.

PSYC C381 ***Scaling*** (3 credits)
Prerequisite: PSYC C310; PSYC C315. The theoretical basis and application of scaling methods in psychophysics and social psychology will be studied. Quantitative scales for the measurement of attitudes and sensations will be derived and constructed. Other topics that may be covered include subjective estimate methods, the law of comparative judgement, unfolding techniques, and signal detection theory.

PSYC C384 ***Measurement*** (3 credits)
Prerequisite: PSYC C310; PSYC C315. A consideration of the general theory of psychological measurement and its application in the development and use of various psychometric instruments such as achievement, intelligence, aptitude, personality, and interest tests. Derived scores, norms, reliability, and validity of these instruments will be discussed in the context of general measurement problems in psychology.

PSYC C390 ***Sexual Differentiation*** (6 credits)
Prerequisite: PSYC C310; PSYC C315, or Introductory Psychology and second-year standing in any degree programme in Arts and Science or enrolment in the Family Life Education Certificate, or permission of the Department. The genetic, hormonal, and social influences shaping the behaviour of men and women from embryonic life through adulthood are examined. Topics discussed include gender identity, sexuality, aggression, and cognitive abilities. The course, primarily approached from the point of view of women, includes an exploration of some of the myths surrounding the differences between men and women.

PSYC C393 ***Psychology of Language and Communication*** (6 credits)
Prerequisite: PSYC C310; PSYC C315, or a minimum of three credits from among TESL C211, LING C200, FRAN C381 or COMS C240 or permission of the Department. The course deals with the cognitive, developmental, and social aspects of language and human communication. Topics discussed may include psychological consideration of modern linguistic theories, child language development, second-language development in children and adults, speech perception, biological basis of language, social psychological aspects of human communication.

PSYC C394 ***Community Psychology*** (6 credits)
Prerequisite: PSYC C310; PSYC C315; or Introductory Psychology and second-year standing in any degree programme in Arts and Science, or permission of the Department. The course will relate psychology to the day-to-day problems of man in society. The contributions of psychology to community leadership in the study of personal, social, cultural, and ecological arrangements will be considered as they relate to such institutions as the family, school, prisons, health and welfare, and political structures.

SELECTED PROBLEMS IN PSYCHOLOGY

The Selected Problems in Psychology (PSYC 398 and PSYC 399) are designed for students enrolled in a Psychology programme. The material will be dealt with in a manner that assumes a background in experimental psychology and, in some cases, specific preparation through prior completion of a related course. The minimal prerequisite will be PSYC C310 (Research Methods I) and PSYC C315 (Statistical Analysis in Experimental Psychology I). Students should consult the Psychology Department Course Guide (published yearly) for details concerning available courses.

PSYC 398 ***Selected Problems in Psychology*** (3 credits)

PSYC 399 ***Selected Problems in Psychology*** (6 credits)

PSYC C400 ***Advanced Experimental Psychology*** (6 credits)
Prerequisite: PSYC C310, PSYC C311, PSYC C315, PSYC C316 or equivalent, and permission of the Department. The course provides experience in the design, conduct, analysis, and reporting of independent research in the major areas of psychology. The research will be undertaken under the supervision of a Faculty member.

PSYC C410 ***Supervised Practicum in Psychology*** (6 credits)
Prerequisite: PSYC C310, PSYC C311, PSYC C315, and/or permission of the Department. A limited number of opportunities for gaining advanced practical experience in various institutional or field-work settings will be available. The student activities will be closely supervised by a qualified Faculty member.

PSYC C420 ***Honours Seminar*** (6 credits)
Prerequisite: Permission of the Department. Open to final-year Honours students. The seminar will deal, in depth, with the research and theory relevant to selected contemporary issues in psychology.

PSYC C430 ***Honours Thesis*** (6 credits)
Prerequisite: Permission of the Department. Open to final-year Honours students. This course will require the student to propose and conduct a study and submit a thesis written according to the APA format. The work will be supervised by a Thesis chairman selected by the student from within the Department.

PSYC C437 ***Directed Research in Psychology*** (3 credits)
Prerequisite: PSYC C310, PSYC C311, PSYC C315, PSYC C316 or equivalent, and permission of the Department. Under the supervision of a Faculty member, the student will carry out an independent research project and report it in writing. The area of study must be decided upon through consultation with the Faculty member.

PSYC C438 ***Directed Readings in Psychology*** (6 credits)
Prerequisite: Acceptance by a supervisor and confirmation by the Department. This course is designed for the advanced student wishing to do independent, individually supervised literature research on a specific topic in psychology. This research will culminate in a written paper. Students should have a well-defined topic in mind before registering for this course.

SPECIAL ADVANCED SEMINARS

Permission of the department is required for registration in the Special Advanced Seminars (PSYC 498 and PSYC 499). These courses are normally open to Specialization and Honours students who are completing their final 30 credits. The usual minimal prerequisite for these specialized courses will be PSYC C310, PSYC C311 (Research Methods I & II) and PSYC C315, PSYC C316 (Statistical Analysis in Experimental Psychology I & II). Because the various topics offered will be dealt with in depth at an advanced level, specific preparation through prior completion of a related course may also be required.

PSYC 498 ***Special Advanced Seminar*** (3 credits)

PSYC 499 ***Special Advanced Seminar*** (6 credits)

31.270 Religion

Chairman
M. OPPENHEIM, *Associate Professor*

Professors
C. DAVIS
M. DESPLAND
S. McDONOUGH

Associate Professors
F.B. BIRD
J. LIGHTSTONE
D. MILLER
I. ROBINSON
J. ROSSNER

Assistant Professor
L. TESKEY

Adjunct Associate Professors
J.B. LIGHTMAN
D. ROME

Adjunct Assistant Professor
H. JOSEPH

Students are responsible for satisfying their particular degree requirements.
The superscript indicates credit value.

60 BA Honours in Religion
6 RELI C211[6]
6 RELI C213[6] or C222[6]
12 From one of three areas of specialization:
A. *Asian Religions:*
Chosen from RELI C311[6], C313[6], C314[3], C315[3], C316[3], C317[3], C318[3], C319[3], C374[3]
B. *Christianity:*
Chosen from RELI C301[3], C302[3], C361[6], C362[6], C363[6]
C. *Judaism:*
Chosen from RELI C301[3], C302[3], C326[3], C327[3], C328[3], C330[3], C350[3], C351[3], C352[3], C353[3], C354[3], C355[3], C356[3], C357[3], C358[3]
6 From courses specified in a second area above
6 Chosen from RELI C331[3], C332[3], C333[3], C334[3], C341[6], C342[6], C343[3], C380[6]
6 RELI C410[6]
6 RELI Elective credits at 300 or 400 level
12 Elective credits in RELI or related Discipline (in consultation with Departmental Adviser)

42 BA Major in Religion
6 Chosen from RELI C211[6], C213[6], C311[6], C313[6], C314[3], C315[3], C316[3], C317[3], C318[3], C319[3]
6 Chosen from RELI C222[6], C301[3], C302[3], C326[3], C327[3], C328[3], C330[3], C361[6], C362[6], C363[6]
30 RELI elective credits at the 300 or 400 level

30 Minor in Religion
30 RELI elective credits (in consultation with the departmental Adviser)

60 BA Honours in Judaic Studies
6 Chosen from RELI C201[6], HEBR C210[6], C211[3], C250[6], C251[3]
6 Chosen from RELI C211[6], C213[6]
6 RELI C222[6]
9 Chosen from RELI C301[3], C326[3], C327[3], C328[3], C330[3]
21 Chosen from RELI C350[3], C351[3], C352[3], C353[3], C354[3], C355[3], C356[3], C357[3], C358[3], C394[3], C395[3], C396[3], C397[3], C401[3]
6 Chosen from RELI C302[3], C313[6], C361[6], C362[6], C372[3]
6 RELI C400[6]

120 Bi-University Major in Judaic Studies
By agreement between the University and Bar-Ilan University, Ramat-Gan, Israel, students may be admitted to a 120-credit bi-University programme designed to provide the academic base for prospective teachers in Jewish Studies programmes at the primary, elementary, and junior high school levels in Canada. Admission to the programme depends upon acceptance by both universities. Successful applicants may spend up to the first 24 months (i.e., two regular and two summer sessions) at Bar-Ilan. The rest of the requirements for the degree must be completed at Concordia while the student is registered in the BA Major in the Judaic Studies programme. Further information on the programme may be obtained from the Department of Religion.

42 BA Major in Judaic Studies
6 Chosen from RELI C201[6], HEBR C210[6], C211[3], C250[6], C251[3]
6 Chosen from RELI C211[6], C213[6]
6 RELI C222[6]
9 Chosen from RELI C301[3], C326[3], C327[3], C328[3], C330[3]
9 Chosen from RELI C350[3], C351[3], C352[3], C353[3], C354[3], C355[3], C356[3], C357[3], C358[3], C394[3], C395[3], C396[3], C397[3], C401[3]

6 Chosen from RELI C302[3], C313[6], C361[6], C362[6], C372[3]

NOTE: By agreement between the University and Bar-Ilan University, Ramat-Gan, Israel, students in this programme may take up to 30 Concordia-equivalent credits at Bar-Ilan. They must, however, meet the requirements for the Major; at least 12 credits of course work in Judaic Studies must be taken at Concordia.

30 Minor or Certificate in Judaic Studies

6 Chosen from RELI C211[6], C213[6]
6 RELI C222[6]
9 Chosen from RELI C301[3], C326[3], C327[3], C328[3], C330[3]
9 Chosen from RELI C350[3], C351[3], C352[3], C353[3], C354[3], C355[3], C356[3], C357[3], C358[3], C394[3], C395[3], C396[3], C397[3], C401[3]

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

RELI C201 ***Classical Hebrew*** (6 credits)
A study of the language of the classical Hebrew texts. The course is designed as a preparation for reading the Hebrew Bible, but takes account of other texts.

RELI C211 ***Understanding Religion*** (6 credits)
A systematic and topical introduction to the study of religion. The purpose of the course is to enable the student to articulate and investigate questions about the meaning and nature of religion. Problems discussed will include the elements of religious experience, forms of religious expression and interpretation, religious communities and practices, and the questions raised by the contemporary interfaith dialogue. Materials will be taken from a variety of religious traditions.

RELI C213 ***Major Religious Traditions of the World*** (6 credits)
A historical and comparative overview of the major religious traditions of the world: Judaism, Christianity, Islam, Hinduism, Buddhism, and Chinese religions. The course will include some consideration of the new religions in North America.

RELI C222 ***Judaic Studies: History of Judaism*** (6 credits)
A historical survey of the Jewish religion from the Biblical Age until the beginning of the modern period. The survey will focus on the sociological, historical, and the intellectual settings of the Jewish people. The emphasis will be on the formation and continuation of the major Jewish concepts, constitutions and traditions.

RELI 298 ***Selected Topics in Religion*** (3 credits)

RELI 299 ***Selected Topics in Religion*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

RELI C301 ***Biblical Studies I: The Hebrew Bible*** (3 credits)
An introduction to the methods and results of Biblical scholarship with regard to the history, culture, and religion of Ancient Israel. Particular attention is given to the major religious affirmations and theological concepts of the Hebrew Bible that have become central in the subsequent development of Judaism.

RELI C302 ***Biblical Studies II: The New Testament*** (3 credits)
An introduction to the methods and results of contemporary New Testament scholarship; a critical survey of New Testament literature considering historical setting, history of text, religious and cultural significance. Attention is given to the central issues and concepts portrayed in the Synoptic, Johannine, and Pauline writings and their importance in the subsequent development of the Western religious tradition.

RELI C311 ***The Religions of India, Ceylon, Southeast Asia*** (6 credits)
A historical study of the major religious traditions native to the Indian sub-continent, Ceylon, and Southeast Asia. Although the course will concentrate upon the development of Hindu and Buddhist religious thought and institutions, consideration will be given to the influence of Jainism, Islam, and Christianity upon Hinduism and Theravada Buddhism. The course will end with an analysis of the contemporary religious situation in India and Burma.

RELI C313 ***Islam*** (6 credits)
A study of the rise and development of Islamic religion and culture from its beginnings in the seventh century to modern times.

RELI C314 ***The Buddhist Tradition*** (3 credits)
An introduction to the Buddhist tradition examining basic elements present throughout most

Buddhist sects, such as: the life of the Buddha; the ethical, intellectual and meditative commitments of the aspirant; worship, and the relation of the Buddhist community to the secular government.

RELI C315 ***Mahayana Buddhism*** (3 credits)
A study of the Mahayana Buddhist vision of the ideal life. Principal topics will include the scriptures in which this vision is articulated, the philosophy through which it is systematized, the ethical and meditative practices through which it may be realized, and the eventual state of Buddhahood.

RELI C316 ***Chinese Religion*** (3 credits)
An examination of the religious life of the Chinese people. Emphasis will be placed upon the way in which each community, family, and individual draws upon the common stock of religious elements (Confucian, Taoist, Buddhist, Shamanistic) to forge a religion suited to its needs.
NOTE: Students who have received credit for RELI C312 may not take this course for credit.

RELI C317 ***Tibetan and Japanese Religious Thought and Institutions*** (3 credits)
A study of the development of new religious forms from the synthesis of imported religions and indigenous practices in Tibet and Japan.
NOTE: Students who have received credit for RELI C312 may not take this course for credit.

RELI C318 ***Religion and Art in India, China and Japan*** (3 credits)
An introduction to the religious art of India, China and Japan from earliest times to the present. The course will focus upon the relationship between the visual arts (architecture, sculpture and painting) and religious world views and mythological symbols that provide the basis for the artistic form.

RELI C319 ***Modern Islam*** (3 credits)
Prerequisite: RELI C313 or permission of the Department. A study of Islamic religious and social thought in nineteenth and twentieth century. Islamic liberalism, traditionalism and fundamentalism will be compared and contrasted.

RELI C326 ***Classical Judaism*** (3 credits)
The concepts, institutions and literature of classical rabbinic Judaism (circa 70-700 C.E.) viewed against rabbinism's biblical and pharisaic background and in the context of the world of Late Antiquity. The course will examine the development of rabbinic systems of thought and law as preserved primarily in the Mishnah and the Talmud. Consideration will be given as well to popular rabbinic beliefs and practices and to early rabbinic mysticism.

RELI C327 ***Medieval Jewish Thought and Institutions*** (3 credits)
Topics in the intellectual, religious, and social history of selected Jewish communities during the Middle Ages. Both internal Jewish developments and changing Jewish relations with their non-Jewish neighbours will be considered.

RELI C328 ***Modern Jewish Thought and Institutions I (1780-1880)*** (3 credits)
A survey of the social and intellectual currents which shaped Jewish modernism from the beginning of emancipation until 1880. Topics will include: the emergence of modern Jewish consciousness, Jewish pluralism, and religious differentiation within Jewish society (Haskalah, Hasidism, science of Judaism, orthodoxy, reform, and conservatism), secular versus religious values, disintegration, and unification within the Jewish community.

RELI C330 ***Modern Jewish Thought and Institutions II (1880 to the present)*** (3 credits)
A survey of social and intellectual currents in Jewish society from 1880 until the present. Topics will include: the impact of anti-Semitism, particularism and universalism, nationalism and its critics, Jewish existentialism and the new mysticism (Rosenzweig, Buber, Rabbi Kook), reactions to the holocaust, and the relationship between Israel and the diaspora.

RELI C331 ***Contemporary Ethical Issues: Personal*** (3 credits)
This course will identify and analyze ethical issues arising at the personal level today. Issues will be discussed in the context of the inter-relationship between moral values and religious convictions. Topics will vary from year to year, but some examples of areas that raise ethical and religious questions for personal existence are: affluence, alienation, work, leisure, aging, drugs.

RELI C332 ***Contemporary Ethical Issues: Societal*** (3 credits)
This course will identify and analyze ethical issues arising from social groups today. In discussing the issues, account will be taken of the bearing of religious institutions and traditions upon social attitudes and problems. Topics will vary from year to year, but examples of problem areas that have evoked ethical and religious debate are: economic and social inequality, race relations, violence and war, hunger and poverty, population growth.

RELI C333 ***Women and Religion I*** (3 credits)
An examination of the roles and images of women in the history of religions. Topics might include: the development of patriarchal religion, religion and sexuality, women and myth, the roles of women in different religious communities. This course will include an integrated sequence of lectures (minimum, three weeks) by an anthropologist on matriarchal and patriarchal societies.

RELI C334 ***Women and Religion II*** (3 credits)
An examination of the religious and ethical questions raised by contemporary discussions of

women's experience. Topics might include: the recent beginnings of a feminist theology, the feminist critique of organized religion and society, the effects of male perspective upon philosophy and theology, and women in the ministry.

RELI C335 ***Sexuality in the History of Religions*** (6 credits)
A study of religious attitudes towards human sexuality using materials drawn from a variety of religious traditions, with special attention to such topics as: incest taboos, adultery, celibacy, ritualized sexual acts, and patterns of marriage.

RELI C341 ***Religion and Literature*** (6 credits)
This course deals with the questions raised for the study of religion by works of literature. An account will be given of the recent development of interdisciplinary studies in religion and literature, and of the problems of method that have arisen. The relation between the interpretation of religious language, with its use of myth, parable, symbol and metaphor, and literary criticism will be explored. The religious implications, direct and indirect, of selected literary works will be discussed.

RELI C342 ***Religion and Science*** (6 credits)
An historical investigation of the reasons for the conflict between religion and science in Western culture, and an examination of the chief issues involving both science and religion still under discussion today.
NOTE: Students who have received credit for RELI C443 may not take this course for credit.

RELI C343 ***Major Psychological Theories of Religion*** (3 credits)
This course will focus upon such major psychological theories of Religion as evinced in the writings of William James, Sigmund Freud, C.G. Jung, Erik Erikson and Abraham Maslow.

RELI C350 ***The Bible and the Ancient Near East*** (3 credits)
The significance of Old Testament institutions within the context of the ancient Mediterranean world. Law, covenant, writing, historiography, the relationship between man and God, sin, sacrifice, and atonements will be discussed. Readings from contemporary literature in translation (Babylonian, Egyptian, Greek, Hittite, Ugarite).
NOTE: Students who have received credit for RELI C325 may not take this course for credit.

RELI C351 ***Judaism in the Hellenistic Age*** (3 credits)
An examination of the cultural interaction between Judaism and Hellenism from the third century B.C.E. to the fifth century C.E. Particular attention will be given to modes of cultural fusion and syncretism evident between Jews and various Hellenistic groups both in the Land of Israel and the Diaspora. Topics include: Jewish sectarian movements in the Late Second Commonwealth; Philo of Alexandria; Josephus; Hellenistic Jewish Gnosticism; Jewish magicians and Holy Men; cults of the dead; Judaic art and artifacts.

RELI C352 ***Sephardic Judaism*** (3 credits)
A critical analysis of the religious traditions peculiar to Sephardic Jews. Particular attention will be given to North African Judaism.
NOTE: Students who have received credit for RELI C329 may not take this course for credit.

RELI C353 ***Jews and Christians: the Historical Encounter*** (3 credits)
An historical survey of the relationship between Judaism and Christianity. The circumstances of the birth of Christianity and its separation from Judaism will be discussed as well as the development of inter-religious disputation and dialogue. Special emphasis will be given contemporary manifestations of the Judeo-Christian encounter.

RELI C354 ***The Mystical Tradition in Judaism*** (3 credits)
A survey of the Jewish mystical tradition, including the development of the messianic idea, Merkava mysticism, Hasidei Ashkenaz, Kabbala in Provence and Spain, Lurianic Kabbala, Sabbatianism and Hasidism. Emphasis in this course will be placed on the study of representative Jewish mystical texts.

RELI C355 ***Modern Jewish Identity*** (3 credits)
The questions "Who is a Jew?" and "What does it mean to be a Jew?" arose at the time of the Emancipation, that is, with the entry of Jews into the social, political, and intellectual life of Europe at the end of the eighteenth century. This class will explore the models of Jewish identity that were offered from the time of Moses Mendelssohn to the contemporary period. The course will also focus on the intellectual trends as well as the historical events that helped to shape Jewish self-understanding.

RELI C356 ***Jewish Communities in North America: Their Historical Development and Religion*** (3 credits)
This course will examine the historical development of the Jewish community of North America and analyze the dynamics of Judaism on this continent. Questions to be raised in this course include: Is there an "American" Judaism? In what respect is the North American Jewish experience a continuation of past Jewish experience and in what way is it a new phenomenon in Jewish history?

RELI C357 ***Holocaust: Historical Circumstances*** (3 credits)
This course will examine the historical circumstances that made possible the systematic destruction of European Jewry in the years 1939-45 as well as the process of destruction and the Jewish and world responses to that destruction.

RELI C358 ***Holocaust: Theological Ramifications*** (3 credits)
This course will examine the theological ramifications of the Holocaust in Jewish and Christian thought. Issues to be discussed include the problem of evil; suffering; the election of Israel; God and His relation to the course of human events.

RELI C361 ***Studies in the History of Christian Thought*** (6 credits)
An introduction to the classics of Christian thought from the Fathers to the modern period. Authors studied at length may vary from year to year, but, in any case, students will acquire a basic knowledge of Augustine, Aquinas, Luther, and Calvin.

RELI C362 ***Questions from the Christian Tradition*** (6 credits)
A study of some of the major religious questions and controversies in the history of the Christian West. The questions chosen will vary, but examples are: grace and free will, faith and reason, history and eschatology, church and state, contemplation and action.

RELI C363 ***Religion in Canada*** (6 credits)
The historical development of the major religious traditions in Canada, their influence on the social, political, and cultural areas of Canadian life and their contemporary significance. Attention will also focus on the inter-action of Catholic, Protestant, Jewish, Indian, and Eskimo groups.

RELI C370 ***Death and Dying*** (6 credits)
A comparative examination of conceptions of death and dying among the major religious traditions. Attention will be paid as well to exploring contemporary notions of death and dying both in so far as we are still informed by traditional conceptions, and to the extent that, for many, such notions have lost their cogency.

RELI C371 ***Religion and Healing*** (3 credits)
An examination of the interaction between religious conceptions and practices on the one hand and healing arts on the other. The course considers such phenomena as: shamanism; healing and Christian shrines; native healing rites, folk medicine of the third world; modern spiritual healing groups; the contemporary dialogue between established forms of medicine, psychiatry and religion in the twentieth century.

RELI C372 ***The Human Body in Religious Faith and Practice*** (3 credits)
A study of 1) the attitudes to the human body in various religious traditions; 2) the impact of the body-mind problem upon religious conceptions of human life and destiny; 3) the body as the foundation of religious symbolism and ritual.

RELI C373 ***Comparative Mysticism*** (3 credits)
This course will introduce students to the study of mysticism and mystical experience using materials drawn from a wide range of cultural and religious sources and examining the work of such contemporary theorists as William James, Rudolph Otto, W.T. Stace, R.C. Zaehner and Robert Ellwood.

RELI C374 ***Islamic Mysticism*** (3 credits)
Prerequisite: RELI C313 or permission of the Department. A study of the major themes of Islamic mystical thought as expressed in philosophical writings and in poetry.

RELI C376 ***Religion, Myth and Magic in Classical Antiquity*** (3 credits)
An examination of the interaction and significance of religion, myth and magic in classical antiquity, in the East and the West, as discernible in such cultures as: Ancient Egypt, Babylon, India, China, Israel, Greece and Rome through the beginnings of the Christian era and the Medieval period.
NOTE: Students who have received credit for RELI C364 may not take this course for credit.

RELI C377 ***Religion and Occult Ideas in Modern History*** (3 credits)
An examination of the basic ideas and cultural impact of occult traditions in the modern period from the so-called "Rosicrucian Enlightenment" in the sixteenth and seventeenth centuries, as described by Frances Yates, to the nineteenth- and twentieth-century resurgence of occult themes in what Robert Ellwood has called "an alternative reality tradition in the West."
NOTE: Students who have received credit for RELI C364 may not take this course for credit.

RELI C378 ***Religion and the History of Psychical Research*** (3 credits)
A review of the history of psychical research (including discoveries, claims, limitations and problems) from the foundation of the British and American Societies for Psychical Research in the nineteenth century through the establishment of contemporary "experimental parapsychology" in the West and behind the Iron Curtain. An evaluation of the possible significance of this material for comparative studies in the philosophies of religion and science.
NOTE: Students who have received credit for RELI C465 may not take this course for credit.

RELI C379 ***Religion and Contemporary Psychic Experience*** (3 credits)
An examination of the contemporary varieties of psychic experience being claimed by persons in the modern world and reported in popular literature, sociological surveys and medical or psychological literature. This material will be critically evaluated in the light of the theories of C.G. Jung, William James and others.
NOTE: Students who have received credit for RELI C465 may not take this course for credit.

RELI C380 ***Comparative Religious Ethics: West and East*** (6 credits)
This course will identify the ways in which different religious and ideological traditions from West and East consider and deal with ethical issues. Examples of such traditions are: Navaho, Jewish, Christian, Islamic, Hindu, Buddhist, Confucian, Humanist, Communist. The ethical values and ideals found in these traditions, and their influence upon individual life patterns and social organization, will be considered.
NOTE: Students who have received credit for RELI C435 may not take this course for credit.

RELI C393 ***Special Topics in Religion and Culture*** (3 credits)
Prerequisite: Permission of the Department. This course affords an opportunity for the advanced student to study a special theme or problem in Religion and Culture.

RELI C394 ***Special Topics in Biblical Studies*** (3 credits)
This course will examine a selected book or theme of the Hebrew Bible with a discussion of current research. The course will focus on critical methodology and its application.
NOTE: Students who have received credit for RELI C395 may not take this course for credit.

RELI C395 ***Special Topics in Ancient Judaism*** (3 credits)
Prerequisite: Permission of the Department. This course will examine a selected issue or area of concern in Ancient Judaism with a discussion of current research. Possible Topics might be: the Dead Sea Scrolls, the Formation of the Mishna, Alexandrian Jewry.
NOTE: Students who have received credit for RELI C396 may not take this course for credit.

RELI C396 ***Special Topics in Medieval Judaism*** (3 credits)
Prerequisite: Permission of the Department. This course will examine a selected issue or area of concern in medieval Judaism. Possible topics might include: Hasidism, Codification of Halakha, messianic thought and movements.
NOTE: Students who have received credit for RELI C397 may not take this course for credit.

RELI C397 ***Special Topics in Modern Judaism*** (3 credits)
Prerequisite: Permission of the Department. This course will examine a selected issue or area of concern in modern Judaism. Possible topics might include: the rise of Reform Judaism, the encounter between Judaism and modern Philosophy, Zionist thought.
NOTE: Students who have received credit for RELI C398 may not take this course for credit.

RELI 398 ***Selected Topics in Religion*** (3 credits)

RELI 399 ***Selected Topics in Religion*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

RELI C400 ***Honours Seminar in Judaic Studies*** (6 credits)
This course is open only to Honours students in Judaic Studies. The student will work with an individual faculty member in a particular area of Judaic Studies. The student will be asked to produce a sustained piece of written work to be read by his/her adviser and at least one other member of the Department.

RELI C401 ***Advanced Studies in Classical Jewish Texts*** (3 credits)
This course will be based on representative readings from Biblical, post-Biblical, and medieval Hebrew literature. It will concentrate on specific topics and will pay attention to the historical and philosophical background of the texts.

RELI C410 ***Honours Seminar in Religion*** (6 credits)
This course is open only to Honours students in Religion. The student will work with an individual faculty member in a particular field of Religious Studies. The student will be asked to produce a sustained piece of written work to be read by his/her adviser and at least one other member of the Department.
NOTE: Students who have received credit for RELI C499 may not take this course for credit.

RELI C491 ***Special Seminar*** (6 credits)
Prerequisite: Permission of the Department. Subject matter will vary from year to year to take advantage of the special interests of the seminar leader. This course will provide opportunities to senior students for discussion and advanced study.

RELI C493 ***Religious Institutions*** (3 credits)
Prerequisite: Permission of the Department. Seminar on a particular period or institution in the history of religion.

RELI C495 ***Religious Thinkers*** (3 credits)
Prerequisite: Permission of the Department. Seminar on a particular thinker or school of thought in the history of religion.

RELI 498 ***Advanced Topics in Religion*** (3 credits)

RELI 499 ***Advanced Topics in Religion*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.280 Russian Studies

Coordinator
I. SMITH, *Associate Professor*

The Russian Studies Programmes prepare students for professional and academic careers in the Civil Service, Trade and Commerce, External Affairs, and other areas of relationship between Canada and the Soviet Union. A wide variety of courses in Russian language, politics, economics, history, philosophy and geography is taught by specialists who work closely with students in designing programmes which best fit their needs.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students should consult with the Programme Coordinator prior to registering for Russian Studies courses. Written work may be required in Russian for these courses.

60 BA Honours in Russian Studies

6 Chosen from ECON C370[6], C375[3], C476[3]*
18 RUSS C210[6], C250[6], C300[6]
12 HIST C377[3], C378[3], C441[6]**
6 GEOG C345[6]***
6 Chosen from RUSS C420[6], C430[6], C435[6], C470[3], C471[3]
12 Chosen from PHIL C334[3], C335[3], POLI C323[3], C333[3], C436[6], RUSS C420[6], C430[6], C435[6], C470[3], C471[3]

**Prerequisite: ECON C201[3], C203[3] or equivalent.*

***It is suggested that students taking HIST C377[3], C378[3], C441[6] also register for HIST C201[3] and C202[3]*

****GEOG C345[6] may be taken for credits in the Honours or Major programmes only when the subject matter is relevant to Russian Studies. A student who has already taken it in a year when the subject matter was not thus relevant registers under GEOG C346[6] in meeting the degree requirements. Courses with Russian content may be taken in consultation with the Coordinator from the following departments: Economics, Geography, History, Philosophy, Political Science, Modern Languages.*

NOTE: Students with a previous knowledge of the Russian language will have their programme determined in consultation with the Programme Coordinator.

42 BA Major in Russian Studies

18 RUSS C210[6], C250[6], C300[6]
6 HIST C377[3], C378[3]**
6 GEOG C345[6]*
12 Chosen from RUSS C420[6], C430[6], C435[6], C470[3], C471[3], ECON C375[3], C476[3], HIST C441[6], PHIL C334[3], C335[3], POLI C333[3], C323[3], C436[6]

**GEOG C345[6] may be taken for credits in the Honours or Major programmes only when the subject matter is relevant to Russian Studies. A student who has already taken it in a year when the subject matter was not thus relevant, registers under GEOG C346[6] in meeting the degree requirements. Courses with Russian content may be taken, in consultation with the Coordinator, from the following departments: Economics, Geography, History, Philosophy, Political Science, Modern Languages.*

***It is suggested that students taking HIST C377[3], C378[3], also register for HIST C201 and C202.*

NOTE: Students with a previous knowledge of the Russian language will have their programme determined in consultation with the Programmme Coordinator.

31.290 Science/Mathematics for Teachers

CERTIFICATE IN THE TEACHING OF SCIENCE (Elementary School Level)

Programme Director
R.H. PALLEN, *Associate Professor*

The Faculty of Arts and Science offers a Certificate in the Teaching of Science (Elementary School Level) for the professional development of teachers interested in science. Practising teachers are offered the opportunity to improve their knowledge of science in order to help them teach modern science more effectively. The presentation will generally be in workshop form, with emphasis on assignments that develop activities for classroom use. Courses will be offered on and off campus during the Winter and Summer months, subject to gufficient demand and the availability of suitable instructors.

Admission Requirements

Admission to this programme is open to teachers who already hold either a General Elementary Licence or an Elementary Special Education Licence. Under certain conditions individuals certified to teach at the Secondary level may be admitted into this programme depending on their educational background and teaching experience.

30 Certificate in the Teaching of Science (Elementary School Level)

30 SCIE C315[6], C316[6], C317[6], C318[6], C319[6]

NOTE: Where students have completed similar courses in previous studies, pro tanto credits may be approved up to a maximum of 12 credits. In some cases, students with fewer than 12 pro tanto credits may, with approval of the Faculty of Arts and Science obtained upon the recommendation of the programme director, be permitted to take courses in related areas for credit towards the certificate. However, at least 18 of the credits must be taken within the programme.

Science courses in this programme have been renumbered.

SCIE C315 ***Philosophy and Methodology of Teaching Science, Elementary Level*** (6 credits)
A study of the role, impact, and responsibility of science at the elementary school level, a study of science programme design, teaching processes, and classroom activities at the elementary level.
NOTE: This course is available only to practising teachers.
NOTE: Students who have received credit for SCIE C314 may not take this course for credit.

SCIE C316 ***Matter and Energy*** (6 credits)
Prerequisite: SCIE C315. States and properties of matter, change of state, force, common machines, mass, volume, expansion, gravitation, heat, light, sound, electricity, magnetism, other sources of energy, conservation of energy.
NOTE: This course is available only to practising teachers.
NOTE: Students who have received credit for SCIE C310 may not take this course for credit.

SCIE C317 ***Man and his Environment*** (6 credits)
Prerequisite: SCIE C315. Temperature, soil, water, air, atmosphere, reproduction, heredity, erosion, weather, nitrogen cycles, pollution, ecology and ecosystems.
NOTE: This course is available only to practising teachers.
NOTE: Students who have received credit for SCIE C311 may not take this course for credit.

SCIE C318 ***Our Earth and the Universe*** (6 credits)
Prerequisite: SCIE C315. Time cycles, volume, density, constitution, and properties of the solar system, gravity, seasons, water, and carbon cycles.
NOTE: This course is available only to practising teachers.
NOTE: Students who have received credit for SCIE C312 may not take this course for credit.

SCIE C319 ***Living Things and Their Activities*** (6 credits)
Prerequisite: SCIE C315. The cellular structure of living things, food chains, plants, animals, germination, growth, soil, water, respiration, nutrition, life cycles. Classification into families, communities, and populations.
NOTE: This course is available only to practising teachers.
NOTE: Students who have received credit for SCIE C313 may not take this course for credit.

CERTIFICATE IN MATHEMATICS FOR TEACHERS (Elementary School Level)

Programme Director
M.A. BOSWALL, *Associate Professor*

Admission Requirements

Admission to this programme is open to teachers who already hold either a General Elementary Licence or an Elementary Special Education Licence. Under certain conditions individuals certified to teach at the Secondary level may be admitted into this programme depending on their educational background and teaching experience.

The Department of Mathematics offers a Certificate in Mathematics for Teachers (Elementary School Level) for the professional development of teachers interested in mathematics. This programme was designed in accordance with the programme-cadre for Elementary Mathematics issued by the General Directorate of Elementary and Secondary Education and approved for "perfectionnement" by the Higher Education Branch of the Department of Education on February 15, 1974.

Practising teachers are offered the opportunity to improve their knowledge of mathematics in order to help them teach mathematics more effectively. The presentation will generally be in workshop form with emphasis on assignments which develop activities for classroom use. Courses will be offered on and off campus during the Winter and Summer months subject to demand and the availability of instructors.

30 Certificate in Mathematics for Teachers (Elementary School Level)

6 MATH C305[6]

24 Chosen from MATH C300[6], C301[6], C302[6], C303[6], C304[6], C307[3], C309[3]

NOTE: Where students have completed similar courses in previous studies, pro tanto credits may be approved up to a maximum of 12 credits. In some cases, students with fewer than 12 pro tanto credits may, with approval of the Faculty of Arts and Science obtained upon the recommendation of the programme director, be permitted to take courses in related areas for credit towards the certificate. However, at least 18 of the credits must be taken within the programme.

CERTIFICATE IN MATHEMATICS FOR TEACHERS (Junior Secondary School Level)

Programme Director
M.A. BOSWALL, *Associate Professor*

Admission Requirements

Admission to this programme is open to teachers who already hold a teaching licence at the secondary level. This licence may be a generalist licence or a mathematics specialist licence.

The Department of Mathematics offers a Certificate in Mathematics for teachers who teach mathematics at the junior high school level. Some of the courses offered have been specially designed to deal with new subject matter which is being introduced into the secondary school curriculum, as well as with aspects of mathematical pedagogy necessary for the teaching of this material. This programme was approved for perfectionnement on February 14, 1974, by the Higher Education Branch of the Department of Education.

30 Certificate in Mathematics for Teachers (Junior Secondary School Level)

15 MATH C400[3], C401[6], C404[6]

15 Chosen from MATH C402[3], C403[3], C405[3], C406[3], C408[3], C409[3], C410[3], C411[3], C417[3], C419[3]

NOTE: In some cases where students have completed similar mathematical courses in previous studies, the Mathematics Department may modify a student's programmes to meet his professional requirements. It may grant pro tanto credits up to a maximum of 12 credits.

Course descriptions see §31.200.

31.300 Science and Human Affairs

Coordinator
TBA, *Professor*

This programme is concerned with the social dimensions and interactions of science and technology. Its teaching and research provide an interdisciplinary examination of the ethical, cultural, political and environmental problems associated with scientific and technological change. Attention is also focused on analysis of the social systems of science from historical, sociological, economic and philosophical perspectives.

The programme is designed for students interested in science and technology, but who do not plan careers in scientific research or the technical professions. Rather it prepares them for constructive careers which involve a grasp of scientific methods, an understanding of scientific principles and an appreciation of the nature, content and implications of scientific research, technological innovation and industrial development. For students working toward degrees in science or engineering, the programme provides the opportunity to develop important additional perspectives and capabilities.

There are a number of streams or areas within the programme. In the History and Philosophy of Science, for example, students may concentrate so as to prepare themselves for graduate work. Another stream examines the social impact of science and technology by focusing on policy problems. Students may develop a variety of approaches for dealing with public policy in either the areas of science and technology or environment. These also are preparatory for existing graduate programmes.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.
Students should consult with the Programme Coordinator prior to registering for Science and Human Affairs courses.

60 BA Specialization in Science and Human Affairs
12 SCHA C250[3], C251[3], C253[3], C254[3]
6 Chosen from SCHA C350[6], C351[6], GEOG C200[6], C211[6]; or Science electives approved by the Coordinator
18 SCHA C450[6], C451[6], C453[6]
18 Chosen from SCHA C452[6], PHIL C226[3] and C228[3], C231[6], C421[6], RELI C342[6], SOCI C405[6], HIST C381[3], C382[3] or electives approved by the Coordinator
6 SCHA C454[6]

NOTE: Students may be required by their adviser to take an English writing course at an appropriate level.

42 BA Major in Science and Human Affairs
12 SCHA C250[3], C251[3], C253[3], C254[3]
6 Chosen from SCHA C350[6], C351[6]; GEOG C200[6], C211[6]; or Science electives approved by the Coordinator
18 Chosen from SCHA C450[6], C451[6], C452[6], C453[6]; PHIL C231[6], C346[6], C421[6]; RELI C342[6], SOCI C405[6], HIST C381[3], C382[3], or elective credits approved by the Coordinator
6 SCHA C454[6]

30 Minor in Science and Human Affairs
12 SCHA C250[3], C251[3], C253[3], C254[3]
18 Chosen from SCHA C350[6], C351[6], C450[6], C451[6], C452[6], C453[6]

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SCHA C250 ***Introduction to Science and Human Affairs I*** (3 credits)
The social and historical context of scientific and technological change. The reciprocal interactions of science with government, ideology, economic development, religion, literature and social theory; science and the city; science and the control of human life; science and human liberation; new definitions of scientific responsibility may be considered.
NOTE: Students who have received credit for INTE C250 may not take this course for credit.

SCHA C251 ***Introduction to Science and Human Affairs II*** (3 credits)
A continuation of SCHA C250. This course may be taken independently.
NOTE: Students who have received credit for INTE C251 may not take this course for credit.

SCHA C253 ***Environmental Issues I*** (3 credits)
The scientific, social and cultural nature of man's relationship to his environment. Emphasis will be

placed on pollution, conservation, population resources and human ecology.
NOTE: Students who have received credit for INTE C253 or URBS C253 may not take this course for credit.

SCHA C254 ***Environmental Issues II*** (3 credits)
A continuation of SCHA C253. This course may be taken independently.
NOTE: Students who have received credit for INTE C254 or URBS C254 may not take this course for credit.

SCHA 298 ***Selected Topics in Science and Human Affairs*** (3 credits)

SCHA 299 ***Selected Topics in Science and Human Affairs*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SCHA C350 ***Case Histories in Experimental Science*** (6 credits)
Readings will concentrate on the original scientific texts (e.g. Harvey, Galileo, Newton, Faraday, Pasteur, Crick and Watson). In the laboratory section, students will follow the original experimental procedures which will also be examined in classroom demonstrations on film and videotape.
NOTE: Students who have received credit for INTE C350 may not take this course for credit.

SCHA C351 ***Astronomy, Cosmology and the Space Age*** (6 credits)
The nature of the universe as interpreted by relevant scientific theories; cosmology and the shape, size and structure of the universe; possibility of intelligent life in the universe; social implications of space flight.
NOTE: Students who have received credit for INTE C351 may not take this course for credit.

SCHA 398 ***Selected Topics in Science and Human Affairs*** (3 credits)

SCHA 399 ***Selected Topics in Science and Human Affairs*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SCHA C450 ***Advanced Study in Technology and Society*** (6 credits)
Prerequisite: SCHA C250; SCHA C251, or permission of the Coordinator. The social role and impact of technology in modern society; alienation in the technological age; the critique of technology; the sources and processes of discovery; invention and innovation; methods of technological assessment and forecasting.
NOTE: Students who have received credit for INTE C450 may not take this course for credit.

SCHA C451 ***Advanced Study in the History of Science*** (6 credits)
Prerequisite: Permission of the Coordinator. Seminar in a selected topic in the History of Science. The emphasis will be on encouraging students to conduct historical investigation on their own under a professor's guidance. The specific content will vary from year to year depending on the instructor.
NOTE: With the permission of the Coordinator students may take this course twice for credit provided that a different subject is dealt with the second time and will register under SCHA C452.
NOTE: Students who have received credit for INTE C451 may not take this course for credit.

SCHA C452 ***Advanced Study in the History of Science*** (6 credits)
Prerequisite: Permission of the Coordinator. Students who have received credit for SCHA C451 may register for SCHA C452 provided the subject matter is different.
NOTE: Students who have received credit for INTE C452 may not take this course for credit.

SCHA C453 ***Science and Public Policy*** (6 credits)
Prerequisite: SCHA C250; SCHA C251 or permission of the Coordinator. This course will deal with those public policy issues which involve a major component of science and technology, i.e., energy, environment, resources, health, etc. The course will also cover the general relationships of science and government relating to the making of science and technology policy particularly emphasizing the Canadian context, but including such topics as technology aid and transfer.
NOTE: Students who have received credit for INTE C453 may not take this course for credit.

SCHA C454 ***Seminar in Science and Human Affairs*** (6 credits)
Prerequisite: Enrolment in Major or Specialization in Science and Human Affairs, or permission of the Coordinator. Taught by all members of staff, this seminar affords an opportunity for intensive examination of an explicitly interdisciplinary theme.
NOTE: With the permission of the Coordinator students may take this course twice for credit provided that a different subject is dealt with the second time and will register under SCHA C455.
NOTE: Students who have received credit for INTE C454 may not take this course for credit.

SCHA C455 ***Seminar in Science and Human Affairs*** (6 credits)
Prerequisite: Permission of the Coordinator. Students who have received credit for SCHA C454 may register for SCHA C455 provided the subject matter is different.
NOTE: Students who have received credit for INTE C455 may not take this course for credit.

SCHA 498 ***Advanced Topics in Science and Human Affairs*** (3 credits)

SCHA 499 ***Advanced Topics in Science and Human Affairs*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.310 Sociology and Anthropology

Chairman
G. DEWEY, *Associate Professor of Sociology*

Assistant to the Chairman
N. SHARPE

Sociology
Professors
S. CHODAK
H. GUINDON
J.D. JACKSON
K. JONASSOHN

Associate Professors
H.T. BUCKNER
J.P. DRYSDALE
E. GAVAKI
S. HLOPHE
E.S. HOECKER-DRYSDALE
H. HORWICH
K. KUSANO
N. KYRIAZIS
G. LeCAVALIER
J.C. MOULEDOUX
B.M. PETRIE
W.C. REIMER
J. SMUCKER
A.J. SYNNOTT
J.F. TASCONE
J. TRESIERRA

Assistant Professor
S. RUSSELL

Anthropology
Associate Professors
C. COLLARD
P.J. de VRIES
A.N. KLEIN
D. LEGROS

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students who already had Honours status by June 1, 1977 will continue to be governed by the requirements that applied at the date of their admission to the Honours programme.

60 BA Honours in Sociology
12 ANTH C202[3]; SOCI C203[3], C210[6]
6 SOCI C300[6]
18 SOCI C402[3], C403[3], C409[6], C410[6]
24 Sociology elective credits* in consultation with the Departmental Honours Adviser.

**With prior approval of the Departmental Honours Adviser, the student may substitute up to 12 credits from a related discipline.*

60 BA Specialization in Sociology
18 ANTH C202[3]; SOCI C203[3], C210[6], C300[6]
6 Chosen from SOCI C310[6], C311[6], C313[3], C314[3], C410[6]
6 Chosen from SOCI C320[6], C330[6], C370[6], C372[6]
6 SOCI C402[3], C403[3]
3 Anthropology elective credits
21 Sociology elective credits* in consultation with the Departmental Adviser

**With prior approval of the Departmental Adviser, the student may substitute up to 6 credits from a related discipline.*

60 BA Specialization in Anthropology and Sociology
See Anthropology

42 BA Major in Sociology
12 ANTH C202[3]; SOCI C203[3], C300[6]
6 Chosen from SOCI C210[6], C310[6], C311[6], C312[6], C410[6]
6 Chosen from SOCI C320[6], C330[6], C370[6], C372[6], C402[3], C403[3]
3 Anthropology elective credits
15 Sociology elective credits in consultation with the Departmental Major Adviser

30 Minor in Sociology
6 ANTH C202[3]; SOCI C203[3]
6 SOCI C300[6]
18 Sociology elective credits in consultation with Departmental Major Adviser. At least 9 of the 18 credits must be taken from courses numbered above the 200 level.

63 BA Honours in Political Sociology
15 ANTH C202[3]; SOCI C203[3], C300[6], C333[3]
18 POLI C200[6], C270[6], C470[6]
12 Chosen from SOCI C402[3], C403[3], C406[3], C407[3], POLI C370[6], C372[6]
12 Chosen from SOCI C280[6], C320[6], C330[6], C335[6], C353[3], C354[3], POLI C230[6], C336[6], C351[6], C353[6], C360[6], C430[6]
6 Chosen from SOCI C409[6]*, POLI C438[6]

**On approval of the Honours Adviser, the prerequisites for SOCI C409 may be modified for students in this programme.*

NOTE: The course-numbering system in Sociology uses the first digit of the course number to indicate the number of prerequisites required for admission to a course. A C2— course has no prerequisites, a C3— has one, and a C4— has two prerequisites. The second digit indicates the place of a course among different subject groups. C-1- courses constitute the research methods group, C-0- courses the theory group. Thus, when a prerequisite is stated as "one 300-level course from Group 2," any course whose number is C32- (i.e., C320, C323, C324, C325) fulfills the prerequisite requirement.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

SOCI C203 ***Introduction to Society*** (3 credits)
An introduction to the sociological study of society. The course will begin with a consideration of the concepts, models, and methods used by sociologists. This will be followed by an examination of selected substantive areas of social life, ranging from the relations between individuals and groups to total societies.
NOTE: Students who have received credit for SOCI C200 may not take this course for credit.

SOCI C210 ***Statistics*** (6 credits)
An introduction to those descriptive and inferential statistics most applicable to the discipline of Sociology. *NOTE See §200.7*

SOCI C220 ***Social Organization*** (3 credits)
Examines the basic characteristics of societal organization through the use of comparative and evolutionary perspectives. Conceptual analysis of specific forms of, and changes in, the comprehensive pattern of social organization.

SOCI C230 ***Race and Ethnic Relations*** (3 credits)
Race and ethnicity are examined as bases of social differentiation. Ethnic group relations are analyzed in relation to stratification and the exercise of power. Explorations of the phenomena of discrimination, prejudice, and intergroup accommodation.

SOCI C261 ***Social Problems*** (3 credits)
Consideration of a range of social problems from a sociological perspective. Examination of the process by which "social problems" are socially defined and recognized.

SOCI C262 ***Social Deviance*** (3 credits)
Attention is focussed on various forms of anti-social behaviour, particularly those that are socially-induced. This course examines the nature, forms, sources, functions and dysfunctions of deviations from social norms, and the mechanisms of social order and control. Deviance is viewed as a social process of interaction and relationships that derive from the social structure and have consequences for it. Various forms of deviance are considered in terms of contemporary social theory and research.
NOTE: Students who have received credit for SOCI C260 may not take this course for credit.

SOCI C263 ***Juvenile Crime and Delinquency*** (3 credits)
This course examines the nature of juvenile crime and delinquency and their social causes and consequenes. Juvenile crime and delinquency, as special kinds of deviance, receive the focus of attention, with emphasis on criminal-justice, juvenile-justice, criminal behaviour systems, and social policy on juvenile crime and delinquency.
NOTE: Students who have received credit for SOCI C260 may not take this course for credit.

SOCI C264 ***Sociology of Sport*** (3 credits)
This course provides a systematic analysis of the social influences upon sport in North America. Special attention is directed to the interrelationships between sport and various social institutions.

SOCI C270 ***Socialization*** (6 credits)
Examination of the social and cultural processes by which the individual becomes a functioning member of society. Attention given to adult socialization and re-socialization in diverse institutional contexts; e.g., schools, occupations, hospitals, prisons, the military. The relation of social structure to role acquisition and role performance is a major focus of the course.

SOCI C272 ***The Family*** (6 credits)
The family as an institution is examined in relation to social structure and historical change. Special emphasis is placed on trends in the nuclear family patterns of contemporary North American society, and on the relation of the family to the broader societal environment.

SOCI C280 ***Quebec Society*** (6 credits)
Focus upon the historic changes in Quebec society, with emphasis upon the period following the Second World War. Examination of issues which have provoked conflicting interpretations, including the Conquest, the nature of Confederation, Quebec nationalism, and the language question.

SOCI C282 ***Canadian Society*** (6 credits)
Analysis of Canadian social structure and change; the relation of the whole of Canadian society to its constituent elements; the relation of Canadian society to its international environment.

SOCI 298 ***Selected Topics in Sociology*** (3 credits)

SOCI 299 ***Selected Topics in Sociology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SOCI C300 ***Classical Social Theory*** (6 credits)
Prerequisite: SOCI C203. Examination of the origins of Sociology and of the sociological works of nineteenth- and early twentieth-century European theorists, with consideration of the social and political context. Particular emphasis is given to the works of Durkheim, Marx, and Weber. Readings include primary sources and critical commentaries.

SOCI C310 ***Research Methods*** (6 credits)
Prerequisite: SOCI C203. Introduction to qualitative and quantitative methods of research in Sociology.

SOCI C311 ***Survey Research Methods*** (6 credits)
Prerequisite: SOCI C203 or SOCI C210. Examination of methods of conducting survey research. Topics include design, sampling, pretesting of instruments, data collection, logic of analysis, multivariate analysis, and report writing.

SOCI C313 ***Field Work Research: Observation*** (3 credits)
Prerequisite: SOCI C203. The collection of primary data by observational methods in natural settings will be studied and practiced on field trips.

SOCI C314 ***Field Work Research: Interviewing*** (3 credits)
Prerequisite: SOCI C203. A variety of types of interviewing will be studied and practiced on field assignments.

SOCI C320 ***Comparative Social Systems*** (6 credits)
Prerequisite: SOCI C203 or SOCI C220. Examination of the problems of development, modernization, and social change in terms of a general theoretical framework. Comparative analysis of trends of development in the West, the Soviet Union and Eastern Europe, and the Third-World nations.

SOCI C323 ***Economy and Society*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220. Examination of the ways in which economic activities are legitimated or otherwise affected by social norms and values, and of the ways in which various social systems react to the strains created by the accommodation of new technology and of new industrial organizations.

SOCI C324 ***Sociology of Economic Development*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220. Consideration of theories and models of economic development. Attention given to the role of foreign-aid programmes, the role of local political élites and self-reliance as factors in economic development.

SOCI C325 ***Social Change*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220. Examination of the sources, mechanisms, and consequences of social and cultural change; analysis of classical and contemporary theories of change, as well as important empirical studies.

SOCI C327 ***Social Issues: Equity*** (3 credits)
Prerequisite: SOCI C203; ANTH C202 or POLI C200. Analysis of selected social issues and public policies as related to poverty, unemployment, ethnic, race and religious discrimination, urban and rural decline. Attention is paid to the changing role of the state in connection with its involvement in solving these problems.
NOTE: Students who have received credit for SOCI C326 may not take this course for credit.

SOCI C328 ***Social Issues: Liberties*** (3 credits)
Prerequisite: SOCI 203; ANTH C202 or POLI C200. Analysis of selected social issues and public policies as related to rights, entitlements, role of the mass media, family and generational problems, bureaucracy. Attention is focussed on the expansion of state functions in connection with implementation of policies related to these issues.
NOTE: Students who have received credit for SOCI C326 may not take this course for credit.

SOCI C329 ***Theories and Structures of Formal Organizations*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220. Examination of the nature and characteristics of formal organizations, their internal structures, interrelationships and problems.
NOTE: Students who have received credit for SOCI C340 may not take this course for credit.

SOCI C330 ***Social Class and Structured Inequality*** (6 credits)
Prerequisite: SOCI C203 or SOCI C220 or SOCI C230. The dynamics of social stratification and differentiation, including economic distinctions and their consequences, social status, power, and mobility. Emphasis upon Canadian society.

SOCI C333 ***Political Sociology*** (3 credits)
Prerequisite: SOCI C203 or 30 credits. This course is concerned with power in social systems; its nature, organization, distribution, determinants, and consequences. The focus of the course is on the

ways in which power is exercised in social systems: social groups, movements and large scale organizations.

SOCI C336 ***Collective Behaviour*** (3 credits)
Prerequisite: SOCI C203. The nature, emergence and dynamics of short-term collective behaviour. There will be an examination of classical and contemporary interpretations of collective behaviour with emphasis on current issues such as the irrationality or rationality of the participants' behaviour. The course will focus on Canadian and American events such as riots and the emergence of violence in demonstrations related to current social problems and issues.

SOCI C337 ***Social Movements*** (3 credits)
Prerequisite: SOCI C203. The nature, emergence and dynamics of organized collective behaviour and social movements will be examined in light of classical and contemporary theories. The course will focus on the impact of leadership, organizational resources and discontent with institutionalized social relations on movements. Contemporary social movements in Québec, the rest of Canada and the U.S. will serve as illustrations

SOCI C338 ***Sociology of Religion*** (3 credits)
Prerequisite: SOCI C203; SOCI C339 or RELI C213. Study of the place of religion in sociological conceptions of social relaity. Consideration of the writings of Marx, Durkheim, Weber, Simmel, Troeltsch, Comte, Niebuhr, Parsons, Bellah, and Berger. Attention also given to appropriate work in allied approaches (e.g., Malinowski and Freud) to the understanding of various dimensions of religion in social context.
NOTE: Students who have received credit for SOCI C337 may not take this course for credit.

SOCI C339 ***Religion and Society*** (3 credits)
Prerequisite: SOCI C203 or RELI C213. Analysis of the relationship between religions and other social institutions in contemporary industrial society with particular emphasis given to the impact of secularization on the sociological dimensions of religious thought and conduct in various social-religious communities.
NOTE: Students who have received credit for SOCI C337 may not take this course for credit.

SOCI C343 ***Sociology of Work*** (6 credits)
Prerequisite: SOCI C203 or SOCI C220. Examination of the structural characteristics of work in modern industrial society. Consideration of the spectrum of occupations and professions; the relationships between work and identity in contemporary society. Special attention placed on the issues of conflict and alienation in work and the impact of work on other aspects of social structure.

SOCI C344 ***Sociology of Leisure*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220. The effects of social, economic, and political institutions upon the structure and use of leisure time. Emphasis upon historical changes and the implications of alienation, anomy, and inequality.

SOCI C345 ***Sociology of Labour Movements*** (3 credits)
Prerequisite: SOCI C203. Origins and development of labour movements; contemporary characteristics of union organizations within the context of their social, political, and economic environments. Emphasis upon Canada and Quebec.

SOCI C346 ***Industrialization*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220 or permission of the Department. A study of the processes of industrialization. Analyses will be directed primarily toward the Canadian experience and will include a consideration of theories regarding industrialization in Canada; an examination of the social and economic impact of large-scale enterprises; the changing role of governments; the ongoing interaction between social organization and advanced technology; and contemporary thought on the social consequences of economic crises.
NOTE: Students who have received credits for SOCI C342 may not take this course for credit.

SOCI C347 ***Sociology of Labour-Management Relations*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220 or permission of the Department. A study of the shifting patterns in labour-management relations with a special focus on Canada. The course will include analyses of theories of management; the impact of the labour union movement, changes in the nature of the labour market; the significance of the growth of the service sector; the changing role of governments in labour-related issues; and contemporary thought on new forms of industrial organization.
NOTE: Students who have received credits for SOCI C342 may not take this course for credit.

SOCI C350 ***Sociology of Urban Regions I*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220 or SOCI C230. Analysis of the historical development of the city, focusing on the pre-industrial city from a cross-cultural perspective.

SOCI C351 ***Sociology of Urban Regions II*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220 or SOCI C230. Analysis of the growth of urbanization in North America, concentrating on the social and spatial organization of Canadian cities, especially Montreal.

SOCI C353 ***Community Studies I*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220 or SOCI C230. The study of locale. The major theoretical approaches used in the study of locale are examined in terms of their content and methodological implications. Special attention is given to the social system and structuralist approaches.

SOCI C354 ***Community Studies II*** (3 credits)
Prerequisite: SOCI C203 or SOCI C220 or SOCI C230. Analysis of selected studies of Canadian communities in terms of one or more theoretical approaches current in the field. Some course materials are available only in French.

SOCI C357 ***Population and Society*** (3 credits)
Prerequisite: SOCI C203. A critical analysis of population dynamics, including an examination of theories concerning the population-resources problem (e.g. Malthus and Marx). Emphasis is given to the relation between ideology and methodology in population study.

SOCI C358 ***Social Demography*** (3 credits)
Prerequisite: SOCI C203 or SOCI C210. Basic principles, issues, data, and methods of population study. Primary focus on social factors that affect demographic processes, and the ways in which demographic change is related to social structure and social change. Consideration of the basic components of demographic analysis: fertility, mortality, and migration.

SOCI C361 ***Criminology*** (3 credits)
Prerequisite: SOCI C203. The major objectives of this course are to come to an understanding of the emergence of European and North American criminology and an understanding of the contemporary perspectives explaining crime, criminal behaviour, and its control.

SOCI C362 ***Crime and Justice*** (3 credits)
Prerequisite: SOCI C203. The major objectives of this course are to come to an understanding of the issues and perspectives related to the problems of apprehending, processing, and punishing the criminal. Thus the process by which the criminal is legally judged to be guilty, the problem of sentencing, the problem of corrections, and the victim are some of the important issues.

SOCI C368 ***(also given as HIST C368) The History and Sociology of Genocide*** (6 credits)
Through the comparative and historical examination of a number of cases, this course investigates the meaning of genocide and the processes that have led to it.

SOCI C370 ***Self and Society*** (6 credits)
Prerequisite: SOCI C203. Study of the basic concepts and theories regarding social definitions of the self. Emphasis on ideas regarding personality, motivation, and interpersonal attitudes, viewed in terms of the interplay between actors and social structures.

SOCI C372 ***Sociology of Sex Roles*** (6 credits)
Prerequisite: SOCI C203. Examination of the social status and roles of men and women in society. Use is made of comparative, historical, and empirical research. Particular attention is paid to the Marxist, feminist, and socialist-feminist theoretical perspectives on the patriarchal nature of society.

SOCI C373 ***Sociology of Childhood*** (3 credits)
Prerequisite: SOCI C203. Comparative and historical approach to the study of the status and role of the child in the family and in the larger society. Emphasis on the sociological aspect of childhood in modern industrial societies.

SOCI C374 ***Symbols, Rituals and The Body*** (3 credits)
Prerequisite: SOCI C203; ANTH C202. The study of the social roles of the body. Topics include body image and self-esteem, the symbolism of beauty and ugliness, height, hair, dress, the face, body-language, health and fitness, eating and drinking patterns. The course is considered in anthropological and sociological perspectives.

SOCI C377 ***Sociology of Education*** (3 credits)
Prerequisite:SOCI C203. Analysis of the social structures within a formal education system. Trends in education are examined in relation to broader patterns of social change.

SOCI C380 ***Social Movements in Quebec*** (6 credits)
Prerequisite: SOCI C203 or SOCI C280. Analysis of historically significant movements for social change in Quebec.

SOCI C382 ***Intergroup Relations in Canada*** (3 credits)
Prerequisite: SOCI C203 or SOCI C230 or SOCI C282. Canadian ethnic group phenomena are examined in the light of theories of intergroup relations. The groups include Indians, Inuit, Blacks, Jews, and English- and French-speakers. The mosaic theory of Canadian ethnic relations will be considered.

SOCI 398 ***Selected Topics in Sociology*** (3 credits)

SOCI 399 ***Selected Topics in Sociology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SOCI C401 ***The History of Social Thought*** (6 credits)
Prerequisite: SOCI C300. Overview of the various ideas and schools of thought which attempt to explain the organization, development, and change of various aspects of human societies. Emphasis on the philosophical underpinnings of the discipline of Sociology. The time span ranges from ancient Greek social thought to early nineteenth-century European thought in which Sociology was founded.

SOCI C402 ***Contemporary Sociological Theory I*** (3 credits)
Prerequisite: SOCI C300. Critical examination of contemporary sociological theories against the background provided by Marx, Durkheim, and Weber. The theories are analyzed in terms of their assumptions, conceptual distinctions, methodological features and ethical implications. Theoretical approaches are chosen to represent a range of approaches to sociology, such as neo-positivism, functionalism, conflict theory and structuralism.
NOTE: Students who have received credit for SOCI C400 may not take this course for credit.

SOCI C403 ***Contemporary Sociological Theory II*** (3 credits)
Prerequisite: SOCI C300. Critical examination of contemporary sociological theories against the background provided by Marx, Durkheim, and Weber. The theories are analyzed in terms of their assumptions, conceptual distinctions, methodological features and ethical implications. Theoretical approaches are chosen to represent a range of approaches to sociology, such as symbolic interactionism, social phenomenology, and critical theory.
NOTE: Students who have received credit for SOCI C400 may not take this course for credit.

SOCI C404 ***Sociology of Literature*** (3 credits)
Prerequisite: SOCI C203; ANTH C202; or a minimum of 6 credits in English Literature, Communication Studies or Political Science. A critical study of literature and para-literature as a cultural and social practice. Various approaches to the sociology of literature will be examined. The emphasis will be on that approach which deals with social genesis of literature and literature as a social product of a social force. Selected Canadian fiction and drama will be analyzed.

SOCI C406 ***Sociology of Knowledge*** (3 credits)
Prerequisite: SOCI C300: Examination of a variety of theories of the relation of knowledge, belief, and meaning to the social context.
NOTE: Students who have received credit for SOCI C405 may not take this course for credit.

SOCI C407 ***Sociology of Science*** (3 credits)
Prerequisite: SOCI C300. Study of the social context of science; the impact of societal factors upon science; the production of scientific knowledge viewed as a social process; the social uses and consequences of science. Consideration of the relation of the sociology of science to the other social studies of science.
NOTE: Students who have received credit for SOCI C405 may not take this course for credit.

SOCI C409 ***Honours Seminar*** (6 credits)
Prerequisite: SOCI C410 and permission of the Honours Adviser. Consideration of methodological and theoretical ideas related to the formulation of an Honours research proposal. Second-term work involves completion of research and writing of an Honours paper.

SOCI C410 ***Research Design and Analysis*** (6 credits)
Prerequisite: SOCI C203 and SOCI C210. Study of quantitative methods of data collection and analysis. Topics include: experimental and quasi-experimental design, principles of measurement, survey design, secondary data sources, techniques of multivariate analysis, and interpretation.

SOCI C411 ***Logic of Sociological Inquiry*** (3 credits)
Prerequisite: SOCI C203 and 6 credits of courses from Group 1. Consideration of the interaction between sociological theory and empirical research. Critical study of the conceptual bases for truth-claims within the major sociological perspectives.

SOCI C429 ***Dynamics of Formal Organizations*** (3 credits)
Prerequisite: SOCI C329 or 6 Sociology credits at the 300 level. Analysis of the major social dynamics at work in formal organizations and examination of the impact of external societal factors on organizations.
NOTE: Students who have received credit for SOCI C340 may not take this course for credit.

SOCI C450 ***Seminar in Urban and Metropolitan Studies*** (6 credits)
Prerequisite: SOCI C203 and one course from Group 5. Intensive study of selected theories and monographs dealing with aspects of urbanization.

SOCI C460 ***Law and Society*** (6 credits)
Prerequisite: SOCI C203; SOCI C260 or SOCI C360. Study of the legal system as an institutionalized system of social control, using historical and comparative data. Special attention is given to the study of law and legal organizations in contemporary society in relation to other areas of sociological inquiry, especially social change, conflict, and decision-making.

SOCI 498 ***Advanced Topics in Sociology*** (3 credits)

SOCI 499 ***Advanced Topics in Sociology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ANTHROPOLOGY

60 BA Honours in Anthropology
6 ANTH C202[3]*; SOCI C203[3]**
6 LING C200[6]
24 Chosen from ANTH 298[3], 299[6], C301[3], C302[3], C303[3], C304[3], C321[3], C322[3], C325[3], C364[3], C365[3], C367[3], C368[6], C370[3], C371[3], 398[3], 399[6]
18 Chosen from ANTH C401[3], C402[3], C426[6], C434[6], C459[6], C460[6], 498[3], 499[6]
6 ANTH C495[6]

**Students exempted from ANTH C202[3] are required to take 3 credits from Anthropology 200- or 300-level courses*

***Students exempted from SOCI C203[3] are required to take 3 credits from Sociology 200- or 300-level courses*

42 BA Major in Anthropology
6 ANTH C202[3]*; SOCI C203[3]**
15 Chosen from ANTH 298[3], 299[6], C301[3], C302[3], C303[3], C304[3], C321[3], C322[3], C325[3], C364[3], C365[3], C367[3], C368[6], C370[3], C371[3], 398[3], 399[6]
18 Chosen from ANTH C401[3], C402[3], C426[6], C434[6], C459[6], C460[6], 498[3], 499[6]
3 SOCI elective credits in consultation with the Departmenal Major Adviser

**Students exempted from ANTH C202[3] are required to take 3 credits from Anthropology 300-level courses.*

***Students exempted from SOCI C203[3] are required to take 3 credits from Sociology 300-level courses.*

60 BA Specialization in Anthropology and Sociology
12 ANTH C202[3]*; SOCI C203[3]**, C210[6]
12 Chosen from ANTH 298[3], 299[6], C301[3], C302[3], C303[3], C304[3], C321[3], C322[3], C325[3], C364[3], C365[3], C367[3], C368[6], C370[3], C371[3], 398[3], 399[6]
6 Chosen from SOCI C310[6], C311[6], C313[3], C314[3], C410[6]
6 Chosen from SOCI C320[6], C330[6], C351[3], C354[3], C357[3], C358[3], C372[6], C402[3], C403[3]
6 Chosen from SOCI courses at the 400 level
6 Chosen from ANTH C434[6]; SOCI C300[6]
12 Chosen from ANTH C401[3], C402[3], C426[6], C459[6], C460[6], 498[3], 499[6]

**Students exempted from ANTH C202[3] are required to take 3 credits from Anthropology 300-level courses*

***Students exempted from SOCI C203[3] are required to take 3 credits from Sociology 300-level courses.*

30 Minor in Anthropology
6 ANTH C202[3]*; SOCI C203[3]**
18 Chosen from ANTH 298[3], 299[6], C301[3], C302[3], C303[3], C304[3], C321[3], C322[3], C325[3], C364[3], C365[3], C367[3], C368[6], C370[3], C371[3], 398[3], 399[6]
6 Chosen from ANTH C401[3], C402[3], C426[6], C434[6], C459[6], C460[6], 498[3], 499[6]

**Students exempted from ANTH C202[3] are required to take 3 credits from Anthopology 300-level courses.*

***Students exempted from SOCI C203[3] are required to take 3 credits from Sociology 300-level courses*

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent course.

ANTH C202 ***Introduction to Culture*** (3 credits)
An introduction to the anthropological study of culture. The course will begin with a consideration of the concepts, models, and methods used by anthropologists. This will be followed by an examination of the many ways in which peoples of the world, past and present, have organized the activities, institutions, and belief systems that sustain social life. The course will conclude with a discussion of the relevance of Cultural Anthropology to contemporary issues.
NOTE: Students who have received credit for ANTH C211 may not take this course for credit.

ANTH 298 ***Selected Topics in Anthropology*** (3 credits)

ANTH 299 ***Selected Topics in Anthropology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ANTH C301 ***Oral Literature*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. This course will acquaint students with various types of oral poetry, historical tales, myths, and personal narratives from indigenous cultures of Africa, Oceania, and North America. The discussion of these materials will focus on contemporary anthropological issues, such as: 1) The various modes of conceptualizing time and historical truth, man's relation to nature and to his fellow man; 2) The reliability of narrator-informants as spokesmen for their own cultures. Translations of transcribed primary sources are supplemented by background lectures on the cultures studied.

ANTH C302 ***Art, Aesthetics, and Anthropology*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. This course introduces students to painting, sculpture, costume decoration, masks, music, and dance in different, non-industrial, cultural settings. Readings and lectures focus on contrasting values concerning beauty in various cultural settings. Readings and lectures focus on contrasting values concerning beauty in various cultural and historical settings. The ways in which different cultures have expressed and explained their aesthetic values will be presented, alongside interpretations by anthropologists and art historians. The course will employ slides and readings. Students will attend films and possibly local galleries whenever they show relevant materials.

ANTH C303 ***Aboriginal Indian and Inuit Political Organizations*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. A study of the various forms of cultural and political organization achieved by the Indian and Inuit peoples of North America before the colonization of their continent by Europe. The course gives a sense of what social life was in these societies, and provides a background which will help to better understand the contemporary conflicts between present-day native people and the Canadian and American governments.
NOTE: Students who have received credit for ANTH C362 may not take this course for credit.

ANTH C304 ***Native People Today*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. First, a review of the aboriginal cultures of native Americans followed by an outline of the history of the Native-White relations, and of the legal status granted to the first people of Canada and the U.S.A. by the various past and present governments. Second, an examination of the demographic and social characteristics of today's native people, including the Metis, as well as of the Indian-Inuit Affairs programmes and government policies. Third, a discussion of present-day native organizations, native claims, and of the prospects for improvements.
NOTE: Students who have received credit for ANTH C362 may not take this course for credit.

ANTH C321 ***The Stateless Societies of Africa*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. The course will survey stateless societies spread across the Sudan into Nigeria. The course will outline hominid evolution in Eastern and Southern Africa and sketch the outlines of African prehistory as reconstructed by archeologists. These will be followed by an investigation of such present-day hunters and gatherers as the Kalahari Bushmen and the Ituri forest Pygmies. The bulk of the course will study a number of stateless societies in the area, such as the pastoral Nuer and the agricultural Tiv. Particular emphasis will be given to the ways in which kinship and marriage organize social, political, and economic relations and preserve social order in these cultures without institutionalized chieftainship.

ANTH C322 ***Early States and New Nations of Africa*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. A survey of chiefdoms and early states in Africa, and of the response of Africa's peoples to colonial rule and new nationhood.

ANTH C325 ***Magic, Science, and Religion*** (3 credits)
Prerequisite: ANTH C202, or RELI C211 or RELI C213, or permission of the Department. A comparative study of beliefs, ritual, and ceremony in tribal, peasant, and modern societies. Consideration of anthropological theories regarding the development and functions of super-naturalistic and naturalistic modes of thought.

ANTH C364 ***Peoples and Cultures of India*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. This course will deal with the development of these cultures from their earliest manifestation to the present. Emphasis will be upon the interrelations of techno-economic, social structural, and ideological aspects, with considerable attention to recent and prospective changes.

ANTH C365 ***Chinese Culture and Society*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. This course will deal with the development of Chinese culture from its earliest manifestation to the present. Emphasis will be upon the interrelations of techno-economic, social structural, and ideological aspects, with considerable attention to recent and prospective changes.

ANTH C367 ***Peoples and Cultures of Southeast Asia*** (3 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. This course will deal with the development of these cultures from their earliest manifestation to the present. Emphasis will be upon the interrelations of techno-economic, social structural, and ideological aspects, with considerable attention to recent and prospective changes.

ANTH C368 ***Peoples and Cultures of the Caribbean*** (6 credits)
Prerequisite: ANTH C202 or equivalent, or permission of the Department. A comparative study of Caribbean peoples and cultures, their history in colonization and slavery, their current similarities in diversity.

ANTH C370 ***Anthropology and Contemporary Issues*** (3 credits)
Prerequisite: ANTH C202. This course examines contemporary world issues from an anthropological, i.e., cross-cultural perspective. Our discussions will range from a critical examination of traditional methods and categories to a consideration of the uses of anthropology in practical

applications. Specific issues dealt with will include the consequences of underdevelopment and modernization, racism and the effects of tourism. The course will conclude with a discussion of the contributions that other disciplines have made to the relevance of anthropology in the modern context.
NOTE: Students who have received credit for ANTH C369 may not take this course for credit.

ANTH C371 ***Agrarian Structures*** (3 credits)
Prerequisite: ANTH C202. This course examines agrarian structures in different socio-cultural and political contexts. A brief introduction will consist of a discussion of the archaeological evidence for early and late Neolithic agrarian structures. This will be followed by an examination of peasantries, their persistence and transformation. The course will conclude with a discussion of the role that subsistence producers play in contemporary societies. Case study material will cover many parts of the world, including the Caribbean and Atlantic Canada.
NOTE: Students who have received credit for ANTH C369 may not take this course for credit.

ANTH 398 ***Selected Topics in Anthropology*** (3 credits)

ANTH 399 ***Selected Topics in Anthropology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ANTH C401 ***Neo-Marxism and Archaic Societies*** (3 credits)
Prerequisite: Twelve credits in 300-level Anthropology, or permission of the Department. An exploration of the neo-marxist literature on archaic societies. The first part of the course offers a systematic introduction to the basic concepts of historical materialism. The second part is devoted to selected case-studies: societies from ancient Africa, America, etc. are analyzed in the neo-marxist perspective. The course concludes with an appraisal of economic life in non-industrial societies.
NOTE: Students who have received credit for ANTH C469 may not take this course for credit.

ANTH C402 ***Neo-Marxist Anthropology and Culture*** (3 credits)
Prerequisite: Twelve credits in 300-level Anthropology, or permission of the Department. This course is a critique of classical cultural anthropology for its concession to a theoretical framework which cannot grasp the locic of cultural reproduction. It proposes a thesis which emphasizes the importance of a communicative and critical sense of rationality for understanding the centrality of culture in the reproduction of social life.
NOTE: Students who have received credit for ANTH C469 may not take this course for credit.

ANTH C426 ***Symbolic Anthropology*** (6 credits)
Prerequisite: 12 credits in 300-level Anthropology, or permission of the Department. Comparative examination of the interaction between symbols systems and other components of society (e.g. political and economic). Religious ceremonies, rituals, rites of passage, myths, folk-tales, etiquette, and social conventions (from both western and non-western societies) will first be analyzed as sytems of communication. The effects of these phenomena upon the continuity of social structures will then be examined. Important publications by the major writers in this field will be closely examined: Levi-Strauss, Leach, Turner, Geertz, Sperber, Althusser, Baudrillard, and Barthes.

ANTH C434 ***Anthropological Theories*** (6 credits)
Prerequisite: 12 credits in 300-level Anthropology, or permission of the Department. A study of the major schools of thought in social-cultural anthropology, such as functionalism, structuralism, the American historical school, evolutionism, cultural materialism, Marxism, and symbolic analysis. Important publications by the major writers in these fields will be closely examined.

ANTH C459 ***Political Anthropology*** (6 credits)
Prerequisite: 12 credits in 300-level Anthropology, or permission of the Department. An examination of political process and political organization in cross-cultural perspective. Part I considers the differing approaches to political organization and processes, leadership, power, and authority in non-western cultures of various degrees of complexity. Part II analyzes social conflict in relation to politics, social continuity, and social change.

ANTH C460 ***Social Anthropology*** (6 credits)
Prerequisite: 12 credits in 300-level Anthropology, or permission of the Department. The first term will cover a range of techniques for analyzing descent and marriage in societies where these are the most important and all-encompassing social relations. Examples of systems of kinship nomenclature, methods of reckoning descent, and rules of marriage will be chosen from different societies throughout the world. The student will be introduced to a series of important anthropological debates concerning the relative significance of descent and marriage in these systems. During the second term, the focus will shift to cultures in which the various functions of the bonds of kinship and marriage have been taken over by government, markets, law courts, and other institutions.

ANTH C495 ***Honours Essay*** (6 credits)
Prerequisite: Honours in Anthropology. Under the supervision of an Anthropology staff member, the student will prepare an Honours essay on a subject chosen in consultation with, and approved by, the professor.
NOTE: Students who have received credit for ANTH C499 may not take this course for credit.

ANTH 498 ***Advanced Topics in Anthropology*** (3 credits)

ANTH 499 ***Advanced Topics in Anthropology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.320 Teaching of English as a Second Language

Director
P.M. LIGHTBOWN, *Associate Professor*

Professors
N. BELMORE
J. UPSHUR

Associate Professors
P. ACHESON
B. BARKMAN
R. MACKAY
G.S. NEWSHAM
J.D. PALMER
M. PETRIE
B.M. SMITH

Assistant Professor
V.A. SHARMA

*BACHELOR OF EDUCATION (Teaching English as a Second Language)

The Centre for the Teaching of English as a Second Language offers the Degree of Bachelor of Education (Teaching English as a Second Language).

Admission Requirements (B.Ed.)

General admission requirements are listed in §13 (Admission Regulations). Specific requirements are as follows:

1. Satisfactory completion of a two-year pre-university programme in a CEGEP or equivalent. Within the programme, the students will be required to have successfully completed the equivalent of four semester courses in English.

2. Owing to the specialized nature of this programme, no more than 30 pro tanto credits will normally be permitted, and the University reserves the right to determine which ones these should be.

3. Candidates must demonstrate competence in English. All non-native speakers of English must take a formal test of English proficiency and obtain a score acceptable to the TESL Centre.

NOTE I: Arrangements for taking the proficiency test may be made through the Admissions Office.

4. The B.Ed.(TESL) is open to both prospective and experienced teachers. The B.Ed. (TESL) is offered in the day and evening, and in the summer session. Some of the courses may also be offered outside Montreal through the Office for Off-Campus Education.

90 BEd (Teaching English as a Second Language)

33 TESL C221[3], C231[3], C324[3], C341[3], C385[3], C413[3], C415[3], C424[3], C431[3], C485[6]

15 Chosen from TESL C201[3], C205[3], C211[3], C318[3], C351[3], C361[3], C433[3], C434[3], C442[3], C491[3], C492[3], approved* language-related courses in LING, MODL, FRAN, EDUC, etc.
NOTE: At least 9 credits must be in TESL

6 EDUC C210[6]

12 Chosen from approved* courses in EDUC, PSYC, ADED.
NOTE: Students who intend to apply for teacher certification in Quebec must include EDUC C445[3] and C414[3] or PSYC C281[3].

6 ENGL C212[3] and C213[3] or C396[6]

6 English literature, to be approved by TESL Centre

12 Elective credits from any department

**NOTE: Written approval of the TESL programme adviser is required.*

CERTIFICATE IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE: SEQUENCE I

This 30-credit programme is offered to experienced teachers who are not native speakers of English.

Admission Requirements

1. Candidates must have an appropriate teacher's certificate or the equivalent of one year's experience as a full-time teacher (400 hours).

2. Candidates must take a formal test of English proficiency and obtain a score acceptable to the TESL Centre. NOTE: Arrangements for taking the proficiency test may be made through the Admissions Office.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student,

provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

The TESL Certificate: Sequence I programme is offered in the evening and in the summer session, and may be offered outside Montreal through the Office for Off-Campus Education.

NOTE II: Individuals who have completed TESL Certificate: Sequence II are not eligible for admission to TESL Certificate: Sequence I.

30 Certificate in the Teaching of English as a Second Language: Sequence I
Courses
TESL C201[3], C203[6], C205[3], C324[3], C341[3], C413[3], C415[3], C424[3], C433[3]

CERTIFICATE IN THE TEACHING OF ENGLISH AS A SECOND LANGUAGE: SEQUENCE II

This 30-credit programme is offered to experienced teachers whose native language is English or whose proficiency in English meets native-user standards.

Admission Requirements

1. Candidates must have an appropriate teacher's certificate or the equivalent of one year's experience as a full-time teacher (400 hours).
2. Candidates must demonstrate competence in English. All non-native speakers of English must take a formal test of English proficiency and obtain a score acceptable to the TESL Centre. NOTE: Arrangements for taking the proficiency test may be made through the Admissions Office.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

The Certificate: Sequence II programme is offered in the day and evening, and in the summer session. Some of the courses may also be offered outside Montreal through the Office for Off-Campus Education.

NOTE III: Individuals who have completed TESL Certificate I are not eligible for admission to TESL Certificate II.

30 Certificate in the Teaching of English as a Second Language: Sequence II
6 ENGL C212[3] and C213[3] or C396[6]
24 TESL C221[3], C231[3], C324[3], C341[3], C415[3], C424[3], C431[3], C433[3]

INFORMATION RELEVANT TO ALL PROGRAMMES

NOTE IV: Upon successful completion of the BEd programme, and application to the Registrar's Services Department, students may be recommended to the Quebec Teachers Certification Service for a Teaching Permit (Probation) to teach English as a Second Language. Teachers previously certified by the Ministry of Education of Quebec will be recommended for a Teaching Diploma. Upon successful completion of the TESL Certificate: Sequence I or Sequence II programme, students (applying in the same way) may also be recommended for appropriate teacher certification. No recommendation is possible, by the TESL Centre, for teaching at the CEGEP, or other adult, level.

To be recommended for certification (Permit or Diploma), students must achieve at least a C (65%) grade in methodology and teaching practice courses: that is,

1. for the B.Ed., in TESL C324, C424, C385, and C485;
2. for the Certificate Sequence I or II options, in TESL C324, C424, and C433.

Students who obtain a passing grade that is below the level required for recommendation for certification will be placed on conditional standing within the programme and will be so informed in writing by the Director of the TESL Centre. Students will be allowed to repeat the course(s) in question only once in order to achieve the required grade. (For the status of this grade as part of the student record, see calendar 16.3.8.)

Students who fail to repeat the course successfully within one year will, to remain in the programme, be required to acknowledge in writing that they have forfeited the right to be recommended for certification.

Students who obtain a failing grade (F, R or NR) in any of the courses listed in paragraphs (1) and (2) above will be required to withdraw from the programme and will also be so informed in writing by the Director of the TESL Centre.

To be recommended for certification in Quebec, students must demonstrate reasonable fluency in French.

In the event that a student meets regular University standards but does not satisfy the requirements for recommendation for certification, the student may apply to receive the University degree or certificate but will not be recommended to the Ministry.

NOTE V: Upon admission, students may be granted exemptions from courses in TESL programmes if they have completed equivalent work at the university level.

Replacement for these exemptions must be made in accordance with the guidelines established by the TESL Centre and approved by the University. Copies of these guidelines may be obtained in the TESL Centre.

Courses in English as a Second Language are designed for students who are not native speakers of English and who need further training in the effective use of English in the university setting. Students

must be tested for placement in ESL C207, C208, C209, or C210. Information about placement testing schedules may be obtained from the English Language Proficiency Testing Office, TESL Centre, 2130 Bishop Street, Room 205, Tel. (514) 848-2454. A special examination fee is charged. (See §15.1)

NOTE: Students enrolled in a 90-credit degree programme in the Faculty of Arts and Science may take ESL courses for degree credit, up to a maximum of six credits.

Written work may be required in English for these courses; please consult with the Department.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

ESL C207 ***English Language—Intermediate I*** (3 credits)
Prerequisite: Placement by the Concordia English Language Diagnostic Test. A course for students who are not native speakers of English and who need further training in the effective use of English in the university setting. Emphasis is on reading, writing, speaking, and listening skills.
NOTE: Students who have completed ESL 100 or have received credit for ENGL C205 or C206 may not take this course for credit.

ESL C208 ***English Language—Intermediate II*** (3 credits)
Prerequisite: ESL C207 or placement by the Concordia English Language Diagnostic Test. This course is a continuation of ESL C207.
NOTE: Students who have completed ESL 100 or have received credit for ENGL C205 or C206 may not take this course for credit.

ESL C209 ***English Language—Advanced I*** (3 credits)
Prerequisite: ESL C208 or placement by the Concordia English Language Diagnostic Test. This course is for students who are not native speakers of English. It encourages the development of effective written communication and improved reading comprehension, so that students may perform competently in their other university work.
NOTE: Students who have received credit for ESL C201 or ENGL C205 or C206 may not take this course for credit.

ESL C210 ***English Language—Advanced II*** (3 credits)
Prerequisite: ESL C209 or placement by the Concordia English Language Diagnostic Test. This course is a continuation of ESL C209. Emphasis is upon writing the academic research paper.
NOTE: Students who have received credit for ESL C201 or ENGL C205 or C206 may not take this course for credit.

ESL C290 ***Communication through the Study of Special Topics*** (3 credits)
Prerequisite: Successful completion of ESL C201; ESL C209 or tested equivalence. This course is for non-native speakers of English only. Its primary aim is to increase students' oral fluency in English; its secondary aim is to encourage improved levels of competence in the other language skills: listening, reading, and writing.

TESL C201 ***Speech*** (3 credits)
This course is open only to non-native speakers of English. The aim of the course is to prepare ESL teachers who are not native speakers of English to analyze pronunciation difficulties in terms of the major phonetic and phonemic features of English. Emphasis is placed on appropriate instruction for improving pronunciation.
NOTE: This course is available for credit only towards TESL Certificate: Sequence I.
Students who have received credit for TESL C221 may not take this course for credit.

TESL C203 ***Effective Communication*** (6 credits)
This course is open only to students who are not native speakers of English. The aim of the course is to raise the level of oral and written communication of ESL teachers who are not native speakers of English.
NOTE: This course is available for credit only towards TESL Certificate: Sequence I.

TESL C205 ***Introduction to the Structure of English*** (3 credits)
This course is open only to students who are not native speakers of English. The structure of English is examined together with ways of using this knowledge for the effective teaching of English as a second language.
NOTE: This course is available for credit only towards TESL Certificate: Sequence I.
Students who have received credit for TESL C231 may not take this course for credit.

TESL C211 ***Introduction to Language and Applied Linguistics*** (3 credits)
In this course, selected characteristics of language and linguistics will be described. Related fields such as psycholinguistics, sociolinguistics, neurolinguistics and anthropological linguistics will be examined. The relevance of work in these areas for language learning and teaching will be discussed.

TESL C221 ***Comparative Phonetics*** (3 credits)
This course is specifically designed for students who intend to teach ESL. It provides an introduction to the sound systems of English and French. It compares the two systems and emphasizes techniques

for teaching pronunciation in ESL classes.
NOTE: When the course is offered to a group preparing to teach students whose first language is not French, the course content may be adjusted to suit their specific needs.

TESL C231 ***Modern English Grammar I*** (3 credits)
This course is primarily designed for students who intend to teach ESL. The course involves a study of important aspects of English structure. It aims to prepare students to apply their knowledge of grammatical structure to the teaching of ESL, for example in the identification and analysis of errors and in the preparation of pedagogical materials.

TESL 298 ***Selected Topics in TESL*** (3 credits)

TESL 299 ***Selected Topics in TESL*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

TESL C318 ***The Teaching of Reading and Writing*** (3 credits)
Prerequisite: 9 TESL credits. This course analyzes the relationship between speech and writing, and surveys the structure and function of written English. Techniques and procedures for teaching reading and writing skills are studied and demonstrated. Current ESL materials are evaluated. Students are expected to prepare specimen materials for developing reading and writing skills in the classroom.

TESL C324 ***Methodology I*** (3 credits)
Prerequisite: TESL C221; TESL C231 or TESL C201; TESL C205 and admission to a TESL programme or permission of the Department. This course reviews current theory in applied linguistics which relates directly to teaching and learning ESL in the classroom. Techniques and methods appropriate to child, adolescent, and adult learners are discussed and demonstrated. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of listening and speaking.
NOTE: A student must have achieved at least a C (65%) in this course in order to be recommended for teacher certification upon completion of the programme.

TESL C341 ***Language Acquisition*** (3 credits)
Prerequisite: TESL C221; TESL C231 or permission of the Department. This course analyzes developmental processes of both native language and second language acquisition. Research is examined in terms of implications for second language teaching.

TESL C351 ***History and Development of the English Language*** (3 credits)
Prerequisite: TESL C221; TESL C231, or permission of the Department. A study of the morphological, phonological, syntactical, and semantic changes that have taken place from Proto-Indo-European to the present. Students are required to do elementary linguistic analyses of texts from different stages in the development of the language.

TESL C361 ***Teaching English for Specific Purposes*** (3 credits)
Prerequisite: TESL C324 or permission of the Department. This course provides instruction in the teaching of language skills to those who require English either as an auxiliary to their scientific, technical or professional skills or as a medium for training in these areas.

TESL C385 ***Observation and Practice Teaching*** (3 credits)
Prerequisite: TESL C324 previously or concurrently. This course introduces the student teacher to the ESL classroom. Students observe experienced teachers, and have opportunities for micro-teaching, peer teaching, as well as some teaching to ESL students. Opportunities are provided for observation and practice with ESL learners at different ages and levels of proficiency in English.
NOTE: Students who have received credit for TESL C433 may not take this course for credit.
Students must have achieved at least a C (65%) in this course in order to be recommended for teacher certification upon completion of the programme.
Students will complete the in-school portion of this course in a (M.E.Q.-approved) private or public primary or secondary school (where French is the language of instruction), in order to be recommended for teacher certification at these levels. Teaching practice completed with adults will not qualify students to be recommended for teacher certification.

TESL 398 ***Selected Topics in TESL*** (3 credits)

TESL 399 ***Selected Topics in TESL*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

TESL C413 ***Audio-Visual Aids*** (3 credits)
Prerequisite: TESL C324 previously or concurrently. This course examines audio-visual resources and their effective use in second-language teaching. Students are given experience with the technical equipment generally available for use in second-language classrooms. In addition, students produce their own audio-visual materials.

TESL C415 ***Testing and Evaluation*** (3 credits)
Prerequisite: TESL C324. An introduction to the general purposes and methods of language testing, with a description of the chief characteristics of sound educational measures. The course examines the processes involved in constructing and administering tests designed to evaluate achievement in the ESL classroom.

TESL C424 ***Methodology II*** (3 credits)
Prerequisite: TESL C324. This course continues the presentation of techniques and methods begun in TESL C324. In this course the emphasis is on classroom-oriented techniques and materials related to the teaching of reading and writing.
NOTE: Students must have achieved at least a C (65%) in this course in order to be recommended for teacher certification upon completion of the programme.

TESL C431 ***Modern English Grammar II*** (3 credits)
Prerequisite: TESL C231. This course continues the study of English grammatical structure begun in TESL C231. It aims to increase students' knowledge in this field and to improve their ability to apply this knowledge to the teaching of ESL.

TESL C433 ***Practicum*** (3 credits)
Prerequisite: TESL C324. This course is open only to students enrolled in Certificate Sequence I or II. In this course students will practise techniques which were introduced in their methodology courses. There will be opportunities for observation of ESL classes taught by experienced teachers. Techniques presented in TESL C324 and C424 will be practised in micro-teaching, peer teaching and sessions with groups of ESL students. Requirements include lesson planning and evaluation of one's own teaching performance.
NOTE: Students must have achieved at least a C (65%) grade in this course in order to be recommended for teacher certification upon completion of the programme.
NOTE: Students who have received credit for TESL C385 may not take this course for credit.

TESL C434 ***Error Analysis*** (3 credits)
Prerequisite: 15 TESL credits including TESL C324 and TESL C341. In this course current theories of second language acquisition are reviewed and applied. Each student carries out analyses of ESL learners' language, focussing on patterns of errors. The identification and classification of errors is followed by the development of teaching materials which the student uses in order to help learners overcome some persistent errors.

TESL C442 ***Problems in Bilingualism*** (3 credits)
Prerequisite: 15 TESL credits. This course is an introduction to some linguistic, social and psychological aspects of languages in contact, with particular attention to the situation in Canada. Emphasis is placed on the description and evaluation of different types of bilingual education programmes and the factors which influence the choice of particular models.

TESL C485 ***Internship*** (6 credits)
Prerequisite: TESL C385 or equivalent. This internship is closely integrated with TESL C424. Students will do supervised teaching in ESL classes. In addition to seminars including demonstrations and discussions of teaching techniques appropriate to different ages and levels of proficiency in English, students will be responsible for teaching a group or groups of ESL learners over a prescribed time period.
NOTE: Students must have achieved at least a C (65%) in this course in order to be recommended for teacher certification upon completion of the programme.
Students will complete the in-school portion of this course in a (M.E.Q.-approved) private or public primary or secondary school (where French is the language of instruction), in order to be recommended for Quebec provincial teacher certification at these levels. Teaching practice completed with adults will not qualify students to be recommended for teacher certification.

TESL C491 ***Study in a Special Subject*** (3 credits)
Prerequisite: Permission of the Department. This course provides an opportunity for advanced students to intensify their study beyond the area of specialization already represented by the curriculum. The selected subject will vary with the special interest of the instructor conducting the course in any given year.

TESL C492 ***Study in a Special Subject*** (3 credits)
Prerequisite: Permission of the Department. A student repeating TESL C491 registers for credits under TESL C492.

TESL 498 ***Advanced Topics in TESL*** (3 credits)

TESL 499 ***Advanced Topics in TESL*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.330 Theological Studies

Chairman
J.J. RYAN, *Associate Professor*

Professor
M. FAHEY, s.j.

Associate Professors
P. GARNET
J. HOFBECK
S.E. McEVENUE
R.P. MOROZIUK
M. SPICER

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

60 BA Honours in Theological Studies

Stage I
3 THEO C201[3]
15 THEO elective credits
Stage II
24 THEO elective credits
Stage III
18 THEO elective credits

NOTE: Students must have their programmes approved by the Department. The following directives should normally be observed:

1. 6 credits should be chosen in each of the theological areas: Old Testament, New Testament, Systematic, History of Christianity.

2. 3 credits should be chosen in Christian Ethics.

3. 6 credits should be chosen in a non-Christian tradition.

4. A maximum of 12 credits may be chosen among the 200-level courses.

5. 6 credits may be taken as a cognate course, offered in another department.

6. A group of 18 to 24 credits within one area should be planned, in order to assure each student of expertise in some aspect of Theology.

7. A reading knowledge of those languages required for advanced work must be planned.

8. Students who already had Honours status by June 1, 1977 will continue to be governed by the requirements which applied at the date of their admission to the Honours programme.

60 Specialization in Theological Studies

With permission of the Department, a student may be admitted to a Specialization programme.

Stage I
3 THEO C201[3]
15 THEO elective credits
Stage II
18 THEO elective credits
Stage III
18 THEO elective credits
6 Credits in cognate discipline

NOTE: Students must have their programmes approved by the Department. The following directives should normally be observed:

1. 6 credits should be chosen in each of the theological areas: Old Testament, New Testament, Systematic, History of Christianity.

2. 3 credits should be chosen in Christian Ethics.

3. 6 credits should be chosen in a non-Christian tradition.

4. A maximum of 12 credits may be chosen among the 200-level courses.

5. A group of 18 to 24 credits within one area should be planned, in order to assure each student of expertise in some aspect of Theology.

6. A reading knowledge of those languages required for advanced work must be planned.

42 BA Major in Theological Studies

Stage I
3 THEO C201[3] and
9 THEO elective credits
Stage II
12 THEO elective credits
Stage III
12 THEO elective credits
6 Credits in a cognate discipline

NOTE: Students must have their programmes approved by the Department.

24 Minor in Theological Studies

3 THEO C201[3]
6 Chosen from THEO C300[3], C310[3], C330[3], C350[3] or C360[3]
3 Chosen from THEO C240[3], C241[3], C264[3], or C266[3], C401[3], C403[3], C409[3], C420[3], C422[3], C432[3], C453[3], C454[3], C455[3], C456[3], C457[3], C458[3], C459[3], C460[3], 498[3]
6 THEO elective credits chosen from the Advanced (400-level) courses offered by the Department
6 THEO elective credits

NOTE: Students must have their programmes approved by the Department.

All courses in the Department, with the exception of tutorials, are open to any qualified student of Concordia.

A diploma programme in Theological, Religious, and Ethical Studies is offered jointly by the Department of Theological Studies and the Department of Religion in association with the Department of Philosophy for offerings in ethical studies.

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

COURSES OF GENERAL INTEREST

THEO C201 ***Methods and Key Concepts in Theological Studies*** (3 credits)
Key theological concepts such as God, creation, sin, incarnation, redemption, church, last things. The nature of theological inquiry: historical, exegetical and systematizing methods. Both concepts and methods will be presented in their historical and ecumenical perspectives. Introduction to the principal aspects of academic theological work.

THEO C205 ***Trends in Theology Today I*** (3 credits)
Major shifts in self-understanding that have led to internal and external restructurings of the Christian Churches. Conceptual and ecumenical changes against the background of contemporary society and social theory. Traditionally disputed theological questions and modern reformulations that have advanced Christian unity.

THEO C206 ***Trends in Theology Today II*** (3 credits)
Prerequisite: THEO C205, or permission of the Department. Further consideration of the themes introduced in THEO C205.

THEO C210 ***Christian Beliefs*** (3 credits)
The Christian assessment of man in the light of belief in God, creation, Jesus Christ, ultimate destiny, and salvation. Specific practices and values of the Christian community. The relationship of church to society as exemplified in social reforms and liberation theology.

THEO C215 ***Christian Mysticism*** (3 credits)
A survey of the Christian mystical tradition: outstanding Christian mystics, representative mystical literature, the role of prayer, and ascetic practices.

THEO C216 ***Mysticism and Psychology*** (3 credits)
This course examines the nature, meaning and the theological and psychological roots of mystical experience. It analyses the writings of both mystics and psychologists to determine whether the pursuit of mystical experience is paranormal behaviour or an authentic human endeavour.

THEO C220 ***The Bible and Western Culture I*** (3 credits)
A study of the Old and New Testaments: their formation, interpretation, and influence on Western civilization from Moses to the present.

THEO C221 ***The Bible and Western Culture II*** (3 credits)
Prerequisite: THEO C220, or permission of the Department. A continuation of THEO C220.

THEO C225 ***History, Culture, and the Christian Way of Life*** (3 credits)
The response of Christian peoples and communities to the challenge posed by various historical cultures in the shaping of Christian beliefs and practices. Specific themes of interest to North America, such as poverty, healing, and minority religious groups.

THEO C230 ***Contemporary Atheism*** (3 credits)
The Christian of today has to face an accelerated process of secularization and new forms of atheism. This course seeks to analyze the contemporary phenomenon of atheism, to examine its roots, to raise the question of its positive meaning, and to define a Christian attitude towards it. Through this dialogue with atheism, we shall attempt to uncover the essentials of Christianity itself.

THEO C240 ***Theology and The Arts I*** (3 credits)
Classical art and myth: the poetic foundations of theological discourse and their relation to the imagination of the artist.

THEO C241 ***Theology and the Arts II*** (3 credits)
An exploration within recent forms in painting, poetry, and film. Theological reflection to discover the civilizing function of images of God produced by the imagination.

THEO C264 ***Theological Dimensions of Psychology I*** (3 credits)
This course is a theological exploration in psychological studies embracing, a) a critical and constructive consideration of Freud and Jung; b) a survey of neo-Freudian social psychologists, such as Horney and Sullivan; c) a survey of third-force psychologists such as Rogers, Maslow, and May.

THEO C266 ***Theological Dimensions of Psychology II*** (3 credits)
The multifaceted methodology of C.G. Jung; themes relating to psychology and theology.

THEO 298 ***Selected Topics in Theology*** (3 credits)

THEO 299 ***Selected Topics in Theology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

INTRODUCTORY COURSES

THEO C300 ***The Old Testament*** (3 credits)
A survey of Old Testament texts (in English translation), with an introduction to contemporary methods of interpretation and appreciation.

THEO C310 ***The New Testament*** (3 credits)
The date, authorship, purpose, structure, and sources of the books of the New Testament. Understanding their content in its historical setting.

THEO C330 ***Principles of Systematic Theology*** (3 credits)
An introduction to the types, methods, tools, and sources of theology. The principal themes of Christian theology are investigated according to their biblical, historical, and philosophical roots.

THEO C350 ***Foundations of Christian Ethics*** (3 credits)
An introduction to the study of Christian ethics; the role of Christian beliefs for a new foundation of ethics in the present intellectual, cultural, and historical situation.

THEO C360 ***Christianity in History*** (3 credits)
The historical dimensions of Christian existence, its institutions, personalities, major events. Methods of inquiry.

THEO C382 ***Contemporary North American Judaism I*** (3 credits)
The sources of authority in Judaism: development of a pharasaic-rabbinic tradition viewed in the light of modern thought.

THEO C383 ***Contemporary North American Judaism II*** (3 credits)
The ideologies of modern religious movements; the theology of the holocaust.

THEO C385 ***World Religions I*** (3 credits)
An introduction to the history and texts of a religious tradition that has deeply marked world history outside the Judeo-Christian streams (e.g. Buddhism, Islam, Hinduism).

THEO C386 ***World Religions II*** (3 credits)
Prerequisite: THEO C385, or permission of the Department. A further study following upon THEO C385.

THEO 398 ***Selected Topics in Theology*** (3 credits)

THEO 399 ***Selected Topics in Theology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

ADVANCED COURSES

NOTE: With the exception of THEO C471, C472, C498, and C499, all 400-level Theology courses have as their prerequisite an appropriate 300-level Theology course, or its equivalent, with permission of the Department.

THEO C401 ***Contemporary Theological Research in Historical Perspective*** (3 credits)
Each year current research from one of the areas of Theology (Old Testament, New Testament, Systematics, Christian Ethics, History of Christianity) will be studied in relation to the historical development of the sub-discipline and its underlying philosophy (methodology).

THEO C403 ***Contemporary Theological Research in Interdisciplinary Perspective*** (3 credits)
Each year current research on a subject from one of the areas of Theology (Old Testament, New Testament, Systematics, Christian Ethics, History of Christianity) will be studied in relation to the findings, presuppositions and methods of other disciplines.

THEO C405 ***The Pentateuch*** (3 credits)
Prerequisite: THEO C300, or its equivalent with permission of the Department. A reading of selected passages. Discussion of current research into the meaning of these ancient books. Methods of inquiry and their application.

THEO C406 ***The Historical Books*** (3 credits)
Prerequisite: THEO C300, or its equivalent with permission of the Department. A reading of selected passages. Methods of interpreting historical texts in the Old Testament and of determining both their historicity and their meaning will be discussed and applied.

THEO C407 ***The Prophetic Traditions*** (3 credits)
Prerequisite: THEO C300, or its equivalent with permission of the Department. A reading of selected passages. Historical backgrounds will be studied. Current methods for interpreting ancient poetry will be discussed and applied.

THEO C408 ***The Psalms and Wisdom Literature*** (3 credits)
Prerequisite: THEO C300, or its equivalent with permission of the Department. A reading of selected

passages. Current methods for interpreting ancient poetry will be discussed and applied. A variety of literary genres, literary forms, and theological themes will be identified and analyzed.

THEO C409 ***Seminar in Old Testament Literature*** (3 credits)
Prerequisite: THEO C300, or its equivalent with permission of the Department. A specific book of the Old Testament will be studied in the light of ancient and modern commentaries and of current research.

THEO C411 ***The Synoptic Gospels*** (3 credits)
Prerequisite: THEO C310, or its equivalent with permission of the Department. Exegesis of selected passages in the light of recent scholarship. Studies in their doctrinal contents. Historical inquiry into the works and words of Jesus.

THEO C412 ***Acts and the Beginnings of Christianity*** (3 credits)
Prerequisite: THEO C310, or its equivalent with the permission of the Department. Acts, Hebrews, James, and I Peter: exegesis of selected passages in the light of recent scholarship, studies in their doctrinal contents. Historical inquiry into the life of the early Church.

THEO C414 ***The Johannine Writings*** (3 credits)
Prerequisite: THEO C310, or its equivalent with the permission of the Department. An examination of Gospel, Letters, and Revelation situated within the context of first-century Christian and non-Christian religious thought.

THEO C416 ***The Theology of St. Paul*** (3 credits)
Prerequisite: THEO C310, or its equivalent with permission of the Department. A historical-critical examination of Paul's theological thought, tracing its development through the chronological sequence of his letters. The focus is on what is central and normative for Christian theology and what is particularly relevant for today.

THEO C420 ***Methods in the Study of Religion*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. This course will examine some of the main approaches to the study of religion, giving emphasis to the key problems and techniques of inquiry in these approaches, with special attention to the theological method in its distinctive Christian context.

THEO C422 ***Religious Language*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. A study of religious and theological language in relation to other forms of language and expression.

THEO C428 ***Nineteenth-Century Criticism of Christianity*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. An introductory consideration of the Enlightenment, in particular Lessing, as theologian. Theological perspectives of Schleiermacher and Hegel. Theological reductions and criticisms of Strauss, Feuerbach, Marx, Kierkegaard, and Nietzsche.

THEO C429 ***Twentieth-Century Consciousness of God*** (3 credits)
Prerequisite: THEO C330, or its equivalent with the permission of the Department. Inter-related themes on the consciousness of God through a study of representative thinkers.

THEO C430 ***God*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. A study of the Christian vision of God. Selected readings from classical theologians.

THEO C431 ***Theology of Revelation*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. An inquiry into revelation as a central theme of fundamental theology. The contributions of representative theologians to the development of the theology of revelation.

THEO C432 ***Theological Anthropology*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. Different religious interpretations and emphases given to the doctrine of man as the image of God from a theological perspective. The distinctiveness of theological understanding as compared with the methods of philosophy, psychology, natural sciences, and literary studies.

THEO C434 ***Word and Sacrament*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. The sharing of religious values through spoken word, scriptures, iconic representation. The use of ritual and symbolic communication in sacramental actions, especially in baptism and eucharist. The possibility of transcultural sharing amid cultural diversity.

THEO C438 ***Human Destiny: Theological Dimension*** (3 credits)
Prerequisite: THEOL C330 or its equivalent with permission of the Department. The interface of Biblical, theological, and scientific data in the understanding they cast on the ultimate destiny of man and his world.

THEO C440 ***Theology of the Church*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. The ministry of Jesus and the post-Resurrection community. Belief in the Holy Spirit's presence in the Church. Tasks of Christians in the world. Faith and freedom. Ecclesial teachership and authority. Pastoral office and ministry.

THEO C442 ***Jesus the Christ*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. The Christian understanding of Jesus the Christ. A biblical, historical and theological investigation of the person and mission of Jesus.

THEO C444 ***Theology of the Christian East*** (3 credits)
Prerequisite: THEO C330, or its equivalent, with the permission of the Department. This course surveys the theological literature, themes and methods characteristic of Byzantine and Slavic theology.

THEO C448 ***Major Christian Theologians*** (3 credits)
Prerequisite: THEO C330, or its equivalent with permission of the Department. Readings and analysis of principal writers who have shaped twentieth-century thought in the Christian tradition. Each year, one particular theologian is chosen for research from writers such as Thomas Aquinas, Karl Rahner, Teilhard de Chardin, Karl Barth.

THEO C451 ***Recent Developments in Moral Theology*** (3 credits)
Prerequisite: THEO C350, or its equivalent with permission of the Department. A study of representative theologians who, in the recent past, have developed new approaches to moral theology and to particular moral problems.

THEO C453 ***Bio-Ethics I*** (3 credits)
Prerequisite: The student must be registered in a programme in Theology, or in Community Nursing or Health Education or the equivalent. A study of the moral aspects of human genetics, experimentation on human beings, behaviour control, health care, death and dying. Those issues of biomedical practices, institutions, and policy-making processes that involve religious values and principles.

THEO C454 ***Bio-Ethics II*** (3 credits)
Prerequisite: THEO C453, or permission of the Department. A continuation of THEO C453.

THEO C455 ***Social Ethics*** (3 credits)
Prerequisite: THEO C350, or its equivalent with permission of the Department. The relation between social sciences and social ethics. Major social ethical practices and discourses of the Christian churches. New approaches to social ethics.

THEO C456 ***Ethics and Economic Life*** (3 credits)
Prerequisite: THEO C350, or its equivalent with permission of the Department. Economic practices, theories, and institutions are studied in relation to their ideational, philosophical, moral, and religious presuppositions. Moral dilemmas faced by businessmen, economists, and corporations. The involvement and responsibility of Christian churches in economic matters.

THEO C457 ***Ethics and Politics*** (3 credits)
Prerequisite: THEO C350, or its equivalent with permission of the Department. A historical and critical examination of the relation between ethics, politics, and religion.

THEO C458 ***The Ethics of Human Sexuality*** (3 credits)
Prerequisite: THEO C350, or its equivalent with permission of the Department. Ethical and theological interpretations of human sexuality in the light of developing insights from the behavioural sciences.

THEO C460 ***Historical Fact and Christian Faith*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. Problems posed by the critical historian's judgment of the Christian's faith in the significance of historical events and persons. The scientific secular revolution and the writing of history, the uses of the present and the rethinking of the past, the appearance of modern unbelief, the autonomy of historical judgment and the new understanding of faith. Methodological contributions from scholars such as Ranke, Dilthey, Weber, Collingwood, Tüchle, Aubert, and Marrou.

THEO C461 ***Early Christianity*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. The developing response of Christianity to challenges presented by the culture, thought, and social structures of the period.

THEO C462 ***History of Eastern Christianity*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. A survey course that examines the development of Eastern Christianity in its various historical forms (i.e., Byzantine, Syrian, African, Indian and Slavic) and ecumenical relations.

THEO C463 ***Medieval Christianity*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. The development of

theological literature, Christian institutions and popular religious culture in medieval Europe from the beginning of universities to the end of the Great Schism.

THEO C464 ***Images of God in Medieval Christianity (1250 - 1500)*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. A study of the spiritual life of late medieval society through a thematic analysis of representations of God in popular forms of religious expression. Liturgical, literary, and artistic representations of God in clerical and lay sources will be treated, with specific attention to late medieval town life.

THEO C466 ***Protestant Origins and Their Distinctive Development*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. Characteristic doctrines and movements of Protestantism through the essential phases of their evolution.

THEO C467 ***Modern Christianity (1500 - 1800)*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. A historical analysis of the events, personalities, and ideas emerging from the religious upheavals of the Reformation and Enlightenment.

THEO C468 ***Medieval Foundations of the Church in New France*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. The medieval heritage of the Roman Catholic Church in New France in its spiritual and structural aspects. The feudal church, theocratic institutions, Gallican traditions, missionary orders, parish life, in relationship to the religious and cultural life in New France from its colonization to the British Conquest.

THEO C469 ***Canadian Church History*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. A historical analysis of Church and sect in the Maritime provinces, the Canadas, and western provinces, from the British Conquest to the present day.

THEO C470 ***Contemporary Christianity (1800 to the Present)*** (3 credits)
Prerequisite: THEO C360, or its equivalent with permission of the Department. A study of more recent historical developments, such as the Modernist crisis, the development of Liberalism, ecumenical and liberation movements.

THEO C471 ***Women and Christianity*** (3 credits)
Prerequisite: THEO C360 or permission of the Department. The theological and historical roles of women in Christianity. Female proto-types and images of women in the Old and New Testaments, Fathers of the Church, canon law, medieval theology, the Reformation, and modern theology. The history of women in the development of Christianity.

THEO C472 ***The Feminine and the Female in Contemporary Christian Theology*** (3 credits)
Prerequisite: THEO C360 or permission of the Department. Contemporary Christian thought on women and the role of the feminine in human development and cultural differentiation: a theological and historical critique of these contemporary perspectives within the context of human liberation.

THEO C490 ***Theology Tutorial I*** (3 credits)
Prerequisite: Third-year standing in Honours, Specialization, or Major programme in Theology. Students may choose, in consultation with a tutorial director, a research topic or other specialized work for intense analysis during the final year.
NOTE: Students who have received credit for THEO C498 may not take this course for credit.

THEO C491 ***Theology Tutorial II*** (3 credits)
Prerequisite: Successful completion of THEO C498. With permission of the Department, in special cases a second tutorial or a continuation of a tutorial under THEO C498 may be given to students who request it.
NOTE: Students who have received credit for THEO C499 may not take this course for credit.

THEO 498 ***Advanced Topics in Theology*** (3 credits)

THEO 499 ***Advanced Topics in Theology*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.340 Urban Studies

Coordinator
A. MELAMED, *Associate Professor*

The Urban Studies Programme introduces the student, through such disciplines as Economics, Sociology, Geography, and Political Science, to the many areas of research and theory relevant to the modern city and its problems. It also provides the necessary background for later post-graduate specialization in some aspect of urban research, and opportunities for field-work.

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students should consult with the Programme Coordinator prior to registering for Urban Studies courses. Students exempted from any required courses must replace them with others that are relevant to the programme, chosen in consultation with the Programme Coordinator.

72 BA Honours in Urban Studies

Stage I

6 URBS C280[6]*
6 POLI C200[6], or C250[6]
6 Credits chosen from SOCI C210[6], C310[6], C311[6], C312[6]
6 ECON C201[3], C203[3]
3 URBS C253[3], or C254[3]
6 URBS C379[3], C382[3]

Stage II or III

6 GEOG C331[6]
6 POLI C336[6]
9 Credits chosen from SOCI C350[3], C351[3], C353[3], C354[3]

Stage III

6 URBS C481[6]
6 URBS C433[6]
3 Credits chosen from ECON C391[3], C392[3], C396[3]
3 URBS C483[3], or C484[3]

**NOTE: URBS C280[6] will serve as a prerequisite for Urban courses in Sociology or Geography.*

66 BA Specialization in Urban Studies

Stage I

6 URBS C280[6]*
3 URBS C253[3] or C254[3]
6 ECON C201[3], C203[3]
6 Credits chosen from SOCI C210[6], C310[6], C311[6], C312[6]

Stage I or II

6 URBS C379[3] and C382[3]

Stage II or III

9 Credits chosen from SOCI C350[3], C351[3], C353[3], C354[3]
6 GEOG C331[6]
6 URBS C481[6]
6 URBS C433[6]
3 Credits chosen from ECON C391[3], C392[3], C396[3]
3 URBS C483[3] or C484[3]
6 Elective credits chosen from the courses offered by the following departments or programmes: Economics, Geography, Political Science, Science and Human Affairs, Sociology, Urban Studies. It is assumed that students will consult the Programme Coordinator when choosing these electives.

**NOTE: URBS C280[6] will serve as a prerequisite for Urban courses in Sociology or Geography.*

42 BA Major in Urban Studies

Stage I

12 URBS C280[6]*, C379[3], C382[3]
6 ECON C201[3], C203[3]

Stage II or III

6 GEOG C331[6]
6 Credits chosen from SOCI C350[3], C351[3], C353[3], C354[3]
3 Credits chosen from ECON C391[3], C392[3], C396[3]
6 URBS C481[6]
3 Elective credits chosen from the courses offered by the following departments or programmes: Economics, Geography, Political Science, Science and Human Affairs, Sociology, Urban Studies. It is assumed that students will consult with the Programme Coordinator when choosing these electives.

**NOTE: URBS C280[6] will serve as a prerequisite for Urban courses in Sociology or Geography.*

30 Minor in Urban Studies

6 URBS C280[6]*
24 Credits chosen from URBS C253[3], C254[3], C379[3], C382[3], C481[6]; ECON C201[3], C203[3], C391[3], C392[3], C396[3]; GEOG C331[6], C433[6]; POLI C200[6] or C250[6], C336[6]; SOCI C350[3], C351[3], C353[3], C354[3]

**NOTE: URBS C280[6] will serve as a prerequisite for Urban courses in Sociology or Geography.*

Because of the renumbering of courses in the Department, students should see §200.1 for a list of equivalent courses.

URBS C253 ***Environmental Issues I*** (3 credits)
The scientific, social and cultural nature of man's relationship to his environment. Emphasis will be placed on pollution, conservation, population, resources and human ecology.
NOTE: Students who have received credit for INTE C253 or SCHA C253 may not take this course for credit.

URBS C254 ***Environmental Issues II*** (3 credits)
A continuation of URBS C253. This course may be taken independently.
NOTE: Students who have received credit for INTE C254 or SCHA C254 may not take this course for credit.

URBS C280 ***Urban Development*** (6 credits)
An introductory course in Urban Development using an interdisciplinary approach to the process of urbanization, the city as a social system, the city as an economic system and the built environment. The material will be presented by films, tapes and special readings.
NOTE: Students who have received credit for INTE C280 may not take this course for credit.

URBS C379 ***(also given as HIST C379) Urban Planning in Historical Perspective*** (3 credits)
This lecture-and-discussion course assesses the development of Canadian cities in general and of Montreal in particular, with special stress on the implications for planning. Topics include the relative importance of geographic site and entrepreneurship in the rise of cities, the metropolitan dominance of, and rivalry between, Montreal and Toronto, the history of the early town planning movement in Canada with discussion of its British roots, the conflict among competing language and cultural groups in Montreal, and the aesthetic and cultural costs of post-war urban redevelopment.
NOTE: Students who have received credit for INTE C380, URBS C380 or HIST C380 may not take this course for credit.

URBS C382 ***Legal Aspects of Urban Planning*** (3 credits)
An overview of the legal aspects of land use planning and zoning; conservation and restoration of historic enclaves and older neighbourhoods. Environmental protection and related issues, in the context of legislation and jurisprudence in Quebec and Canada since the beginning of the twentieth century.
NOTE: Students who have received credit for INTE C380, URBS C380 or HIST C380 may not take this course for credit.

URBS C433 ***Applied Urban Geography—Urban Design*** (6 credits)
Prerequisite: GEOG C331, or permission of the Coordinator. An applied course in urban design and land use planning. An overview of current theory and practice will be balanced, during the second term, by studio-planning projects emphasizing a team approach.
NOTE: Students who have received credit for GEOG C401 or INTE C480 or GEOG C433 may not take this course for credit.

URBS C481 ***Seminar in Urban Studies I*** (6 credits)
Seminar limited to second and third year students in the Urban Studies programme. An advanced seminar on the urban phenomenon as it occurs in the Canadian context. It will explore relevant urban issues and seek the development of urban policy positions. Students will be asked to prepare and submit appropriate research policy papers.
NOTE: Students who have received credit for INTE C481 may not take this course for credit.

URBS C483 ***Seminar in Urban Studies II*** (3 credits)
Prerequisite: URBS C481 and permission of the Coordinator. Students will complete a field assignment in an urban activity area. The seminar will allow students to discuss, with each other and the professor, their experiences and problems encountered during the field assignment.
NOTE: Students who have received credit for URBS C482 or INTE C482 may not take this course for credit.

URBS C484 ***Seminar in Urban Studies III*** (3 credits)
Prerequisite: URBS C481 and permission of the Coordinator. Students will complete a field assignment in an urban activity area. The seminar will allow students to discuss, with each other and the professor, their experiences and problems encountered during the field assignment.
NOTE: Students who have received credit for URBS C482 or INTE C482 may not take this course for credit.

31.400 Computer Science

The Department of Computer Science offers a Minor in Computer Science available to students in the Faculty of Arts and Science. For further details of this programme, see §71.80.4.

31.500 Colleges, Institutes, Schools, and Centres

The Faculty of Arts and Science is the largest Faculty in the University. In order to combat the depersonalization so often found in a large Faculty, the Faculty of Arts and Science has created smaller, more manageable units offering a personalized approach to education. At present, there are seven such units in existence: Centre for Co-Operative Education, Centre for Mature Students, Liberal Arts College, Lonergan University College, School of Community and Public Affairs, Science College, and Simone de Beauvoir Institute. Each college, centre, school or institute is composed of a group of students and Fellows who are united by a particular philosophy of education.

Each unit operates in much the same fashion. Normally a student admitted to the University will enroll in a specific Department-based programme — a Major, Specialization, or Honours. Students in the Liberal Arts College may, however, elect to enroll in the College Major in Western Society and Culture instead of in a Departmental programme. Similarly, students in the Simone de Beauvoir Institute may enroll in a Major programme in Women's Studies. Students attracted by the particular educational opportunities offered by one of the units will apply to the unit in question. Once admitted to the College, Institute, School, or Centre of their choice, students may benefit from the academic curriculum, the extra-curricular activities, and social and intellectual environment provided in each of these units. It is the goal of these units to assist students to broaden their specialized disciplinary education with carefully chosen electives, with specially designed tutorials, and with career-oriented advising, all set in a more personal and friendly "university college" environment.

Each unit has a physical location of its own, where its students may gather to exchange ideas, whether in the classroom or in one of the lounges provided for such interaction. As well, there is a library of basic books and periodical literature. From time to time, there will be planned activities, special-interest seminars, and stimulating lectures by invited guest speakers.

Each unit has a group of faculty members from within the University assigned as Fellows or Tutors, whose major function will be to act as student advisers. Together, students and Fellows or Tutors plan a carefully integrated undergraduate programme based on the philosophy of education promoted.

The advantage of this approach to education is that students may utilize the resources of a large Arts and Science Faculty, yet still enjoy the effective interchange of ideas that only a small unit can provide.

31.510 Centre for Co-Operative Education

Director
G.J. TRUDEL, *Associate Professor, Chemistry*

Assistant to the Director
J. FISET

Programme Directors
L. ADLER, *Associate Professor, Mathematics (Director, Mathematics Co-Op)*
M. ARMSTRONG, *Professor, Economics (Director, Economics Co-Op)*
R. PALLEN, *Associate Professor, Chemistry*
R.E. TOWNSHEND, *Associate Professor, Chemistry (Director, Chemistry Co-Op)*
R.H. ZIENIUS, *Associate Professor, Chemistry*

The Centre for Co-Operative Education at Concordia University offers Co-Operative Programmes as an integral part of the Departments of Chemistry, Economics and Mathematics.

Co-Operative Programmes are open to students who are enrolled in many of the Honours and Specialization Programmes offered by the above Departments.

As it becomes feasible it is the intent of the Centre to launch other disciplines in the Co-Op format.

The Co-Operative Philosophy

Co-operative education is an educational process in which academic study terms are alternated with work terms in industry, giving students practical on-the-job experience in the area of their choice while continuing their work towards a degree.

Essentially, it is a system that integrates the interests of employer organizations, educators and students towards the attainment of common goals.

The Co-Operative Education concept as practised in a number of Canadian universities, has not only proved viable but has been outstandingly successful in developing career opportunities for students of almost any discipline. A recent survey showed that Co-Op students are a university's most marketable product and major companies who have participated in Co-Op programmes readily admit that preference in hiring is given to the Co-Op student. With some companies, the practice has become commom to recruit from among Co-Op graduates when looking for candidates with leadership potential for future positions.

Although the potential rewards from completion of the Co-Op programme are great, students should keep in mind that the programme, with its alternating academic and work terms, is extremely demanding.

ADMISSION TO CO-OP

Students who meet the criteria of the Honours or Specialization programmes offered in the Co-Op format and who are legally eligible to work in the public and private sector should indicate that they wish to apply to the Centre by filling in the appropriate box on the University Admissions Form. Students are also asked to submit a resumé of past work experience and a statement of the reasons for their interest in the programme. Selected students will then be invited to an interview, and asked to expand on reasons for their interest. Students accepted to the programme will be assigned a Coordinator from the Co-Op Committee within the department in which they are registered, as an adviser.

CO-OP PERFORMANCE REQUIREMENTS

Accepted applicants to Concordia's Co-Op Centre enrol as regular undergraduates in the programme of their choice and are subject to the academic regulations that apply to their programme. The Co-Op programme consists of six academic terms interspersed with four work terms for a total commitment of forty months over four years.

Centre for Co-Operative Education students enrolled in an Honours or Specialization must maintain a 'C' average (i.e. 65%) in the required courses, and no grade lower than a 'D' (i.e. 55%) in any course, elective or required. Students registered in Honours must meet the Faculty Honours programme academic requirements.

The evaluation of the four required work terms will be documented on an assessment form completed by the employer and a Work Term Report submitted by the student at the conclusion of each work term. These papers are evaluated by at least two faculty members of the department concerned. The Work Term Reports are not considered for degree credits, and they are marked on a pass/fail basis. Failure to meet the Co-Op Performance Requirements will result in the dismissal of the student from the Co-Op programme and hence the Centre.

Work Term

Concordia's Co-Operative Education programme is not to be construed as a placement operation or an inexpensive labour apprenticeship. The Work Term is an essential part of the student's learning experience and there is to be equitable remuneration paid for work performed. The University is responsible for negotiating Work Terms with employers who provide job descriptions to the Centre. The students prepare resumés for the various employers. After an initial screening, the employers interview students, then the students/employers rank each other. The Director of the Centre is responsible for the final student/employer match. During the Work Term, the Centre will continue to carry out its teaching responsibility by having a Coordinator visit the students at their place of work and evaluate the work performance, gauge the learning opportunities, assess the compatibility of student and employer and, if necessary, take corrective action. It should be noted that the University does not guarantee each student a job.

Advantages of a Co-Op Education

The training in theory and practice in a structured and purposeful manner allows the student to come to terms with the realities of professional development in a way that allows for the development of self-confidence, self-reliance and self-motivation. From the work terms, students learn to accept responsibility and the importance of deadlines. Realistic career expectations may be more easily formed. In the Centre, besides technical knowledge and practical experience, students gain skills in interpersonal relations through participation in seminars, workshops, talks and, of course, through social activities.

Employers benefit as well. The employer who agrees to co-operate with the Centre gains through the opportunity to evaluate prospective personnel, without making permanent employment commitments, and the availability of students on a year-round basis. In recruiting permanent employees, they have available to them trained graduates who can be slotted into an operation without a training period. These advantages are seen as rewards in terms of lower turnover in trained personnel as the Co-Op graduates know what their goals are. Hence the economic return is one of much lower recruiting costs for experienced staff. The collaboration between employers and faculty provides an opportunity for employers to contribute to the educational process and to gain clearer insights into the University's resources from which he can draw.

UNDERGRADUATE PROGRAMMES

Chemistry Co-Op

The Chemistry Co-Operative Programme is offered to students who are enrolled in the B.Sc. Honours or Specialization in Chemistry, Specialization in Biochemistry or Specialization in Analytical Chemistry.

Students in CHEM Co-Op take the regular academic programme; however, in the work terms the employment opportunities range among a wide variety of industrial and government agencies located throughout Canada. Students are encouraged to choose their work term positions in a way which provides them with experience ranging from basic analysis in industrial processes and environmental control to senior research placements in the laboratories of various employers.

Economics Co-Op

The Economics Co-Operative Programme enables students to complete a Co-Op degree in a B.A. Honours or Specialization in Economics. The academic content of the Economic Co-Op programmes is identical with the regular programme; however, the required work terms provide the Co-Op student with the unique opportunity of experiencing economics in an applied format. Because of the variety of course choices, an Economics Co-Op student is prepared to seek employment during his or her work terms in a variety of public sectors including Provincial and Federal Government agencies. Private sector positions might include placements in banks, consulting firms, or planning departments in a variety of industries.

Mathematics Co-Op

Math Co-Op is open to students who are admitted to the B.A. or B.Sc. Honours or Specialization in Applied Mathematics or Statistics or Specialization in Actuarial Mathematics.

The academic content of the Math Co-Op programmes is identical to the regular programmes. However mathematics, as a respected academic subject, is an important training for an ever-growing multitude of disciplines.

Students pursuing an Honours or Specialization in Applied Mathematics or Statistics would, we envisage, be employed during their work terms in a variety of business, government, or scientific environments.

CO-OP SCHEDULE

Activity **flow-chart** for a single group of students in the University co-operative education programme.

YEAR	FALL Sept.-Dec.	WINTER Jan.-April	SUMMER May-Aug.
1	1st Year Campus Term	1st Year Campus Term	1st Work Term

YEAR	FALL Sept.-Dec.	WINTER Jan.-April	SUMMER May-Aug.
2	2nd Year Campus Term	2nd Work Term	2nd Year Campus Term
3	3rd Work Term	3rd Year Campus Term	4th Work Term
4	3rd Year Campus Term		

NOTE 1: The above activity flow chart is for a student admitted into a Co-Op programme in the Fall term of the student's first academic year. However, students may be admitted at the start of their second academic term following their September entry, with special permission. Students are required to complete successfully in each academic term, a minimum of 12 credits toward their degree within the standards stated under "Co-Op Performance Requirements".

NOTE 2: To complete the Work Term requirements, students must pass the first four Work Terms. The requirement to pass a work term is described under "Co-Op Performance Requirements".

The Work Term which is negotiated by the Centre with the employer is for a minimum of fourteen weeks. Duration beyond this period, but within the context of the designated four months, is at the sole discretion of the employer.

CONTACTS

Loyola Campus
Dr. G.J. Trudel, Director
Centre for Co-Operative Education
(514) 848-3951

John Fiset, Assistant to the Director
(514) 848-3952

Ms. Sandy Cochrane
(514) 848-3950

Sir George Williams Campus
Dr. R.E.Townshend, Director,
CHEM Co-Op (514) 848-3349

Prof. Muriel Armstrong, Director,
ECON Co-Op - (514) 848-3920

Prof. L.S. Adler, Director,
MATH Co-Op (514) 848-3215

31.515 Centre for Mature Students

Director
R. DIUBALDO, *Associate Professor, History*

Associate Director
W.J. COZENS

Fellows
G. AUCHINACHIE, *Associate Professor, English*
M. BRIAN, *Associate Professor, Mathematics*
R. CRONIN, *Associate Professor, Biology*
A. HAMALIAN, *Associate Professor, Education*
F.E. SHLOSSER, *Associate Professor, History*
G. TAGGART, *Professor, Études Françaises*
J. TASCONE, *Associate Professor, Sociology*

Associate Fellows
A. ADAMS, *Assistant to the Dean of Fine Arts*
D. ADKINS, *Counsellor, Guidance Services*
L. BECKSEI, *Academic Programmes Coordinator, Engineering and Computer Science*
L.D. CAMPBELL, *Supervisor, Academic Scheduling*
B. MARKLAND, *Associate Professor, Accountancy*
R. McDONALD, *Professor, Applied Social Science*
R. SMITH, *Associate Professor, Mathematics*
T. SWIFT, *Director, Admissions*

Concordia University has a tradition of concern for the education of mature students; it has always sought to assist students of 21 and over to undertake undergraduate studies.

The primary aim of the Centre for Mature Students is to develop services to students returning to formal studies after an absence of many years. It is difficult to plunge suddenly into a very large urban university after years away from classes and studying; therefore, the Fellows and Staff of the Centre hope to reach out to all Mature-Entry students to offer them encouragement and guidance. The Centre has quarters on both campuses, that function as a "home base" for students who want counselling or are simply in need of some social contact with their peers. Newly equipped lounge facilities are provided in which students may meet.

Furthermore, the Centre has Fellows chosen from a cross-section of faculty members especially interested in the problems encountered by adults working towards a degree. Fellows of the Centre will be on hand at appointed times to offer advice and information on such matters as the choice of initial courses at the outset of studies and the variety of Concordia's programme offerings for those ready to embark on their field of undergraduate concentration. At all times, someone will be present to answer questions on both the Sir George Williams and the Loyola campuses.

It is the intention of everyone involved in the work of the Centre to provide mature students with a sense of belonging and thus help them gain the self-confidence so necessary for successful university work.

The Centre will be open from 9 a.m. to 8:30 p.m., Monday through Thursday, and from 9 a.m. to 5 p.m. on Friday. The Centre for Mature Students has two locations, as follows:

The Sir George Williams Campus
Hall Building
1455 de Maisonneuve Blvd. W.
4th Floor, Suite H-462
Tel: 848-3890

The Loyola Campus
Central Building
7141 Sherbrooke Street West
3rd Floor, Room CC-308
Tel: 848-3895

General Information

The Mature-Entry means of access to the University is designed to enable individuals who are 21 years of age or older, and who have not satisfied the normal admission requirements, but have demonstrated potential, to take undergraduate programmes. The University assumes that the age of the students will have allowed them to acquire informally some of the general education given to younger students at the collegial level and, as a result, the additional credits required of Mature Entrants are intended to supply the knowledge and skills which will be needed to undertake a given programme of specialization.

While they are obtaining these additional credits, mature students are considered in every way to be undergraduates.

The additional number of credits required of students who do not possess the necessary academic prerequisites to start immediately the 90-credit undergraduate programme is set out in §14 of this calendar, where Mature Entrants will also find information about specific requirements, recommended courses, etc.

31.520 Liberal Arts College

Principal
H. SHULMAN, *Associate Professor, Political Science*

Vice-Principal and Core Fellow
R.K. MARTIN, *Associate Professor, English*

Core Fellows
M. DESPLAND, *Professor, Religion*
F. KRANTZ, *Associate Professor, History*

J.F. LAFFEY, *Professor, History*
C. LEVY, *Associate Professor, Etudes Françaises*

Fellows
L. GEFIN, *Sessional Lecturer, English*
J. HERZ, *Professor, English*
W. KNITTER, *Associate Professor, Education*
E. PECHTER, *Associate Professor, English*
M. PHILMUS, *Associate Professor, English*
G. RUDE, *Professor, History*
I. SMITH, *Associate Professor, History*

Liberal Arts College provides students with a broad, demanding educational foundation in the liberal arts. Its curriculum is an alternative for students dissatisfied with premature specialization and fragmentation of knowledge. Defining the "liberal arts" in contemporary terms, the College stresses work in a Core Curriculum of related courses, seminars, and tutorials in the humanities, social sciences, art, music, and science. Its core courses stress the acquisition of basic knowledge and research and writing skills, as well as an awareness of interpretative problems and advanced analytic approaches. The Core Curriculum, in turn, makes for informed choices in the College's second major component, advanced work and research in a specific discipline or area.

Objectives

The major goal of Liberal Arts College is to assist the student in the process of becoming an educated person. The College seeks to translate into modern idioms the traditional vision of education as a preparation for life. Its core courses and seminars, sharing a common concern with the changing nature of society and culture, aim at the development of an informed critical consciousness.

Emphasis is also placed on sharpening the basic expressive and analytic tools indispensable to social and cultural understanding. All College students are expected to present, or to acquire, a knowledge of a second language (normally, French), necessary for their research, and to write and to express themselves clearly. Training in research techniques is stressed, and original, independent work encouraged.

Liberal Arts College, linking demanding general education to significant specialization, is committed to serious intellectual work. Through its curriculum, staff, standards, and academic environment, it hopes to communicate the excitement and creativity of such engagement to its students.

Liberal Arts College Admissions and Programme Requirements

Students admitted to the University and seeking to enter the College must have a "B" average from CEGEP, or its equivalent. All students upon admission must demonstrate proficiency in English composition and a second language, or undertake necessary make-up work.* All applicants should apply through the University Admissions Office; they should also call or write the College for an interview. Mature students are admitted to the College on the basis of an interview and an examination of their record. Full-time degree candidates will normally complete their College Core Curriculum within three academic years; part-time degree candidates should complete their College Core Curriculum within six academic years. Students who have been admitted to departmental Honours programmes must maintain a "B" average in their College Core Curriculum; all others must maintain a "C" average in their College Core Curriculum. All Honours students in the College are expected to undertake significant original work, on a staff-guided basis, in their final year.

**Les étudiants francophones devront donner la preuve de leur connaissance de la langue anglaise.*

Staff

Faculty Fellows chosen from the University's departments form the staff of all College courses, seminars, and tutorials. Teaching Fellows are resident in the College, as is its Principal, who also teaches in the Core Curriculum. It is intended that, each year, a Distinguished Visiting Fellow, selected on the basis of outstanding academic achievement and renown, will be resident and will teach in the College.

Facilities

Liberal Arts College is located on Concordia University's downtown Sir George Williams Campus. Much of its seminar and tutorial teaching is done in the same building that houses the College's Principal and Senior Fellows. The College has student study areas, a course-materials library, and audio-visual facilities, as well as Commons Rooms and a collection of important newspapers, journals, and periodicals. The College is the focus of an extra-curricular programme of visiting speakers and cultural events, and is a place where the exchange of ideas and views generated in courses and seminars continues on a more informal basis.

Counselling

Close student-faculty contact and exchange is part of the Liberal Arts College's stress on serious intellectual work. Each student is assigned to a faculty Fellow who acts as a personal adviser, and who follows the student's progress through the College, advising on the choice of disciplinary or area specialization. All students' work is evaluated annually by the Principal and Fellows.

College Council

Council, composed of Fellows and students, is the formal decision-making body of Liberal Arts College. It meets regularly, under the chairmanship of the Principal, as a forum in which current issues and future policy are discussed and decisions taken. Council is that body which ensures the democratic participation of all members of the College in its on-going academic and extra-curricular work.

Programmes

All Liberal Arts College students must take the Core Curriculum. These inter-related courses, including seminar and tutorial work, as well as the final-year Integrative Seminar, constitute a significant segment of the course work required for College-sponsored B.A. programmes. Liberal Arts College stresses Honours work, although a student may, with the permission of the College, combine the Core Curriculum with a departmental Specialization or Majors programme, or with the Individual Studies Programmes. Selected students may, with College permission, be admitted to the College's BA Major in Western Society and Culture.

42 Liberal Arts College - Core Curriculum

Stage I

18 LBCL C291[6], C292[6], C293[6]

Stage II

12 Chosen from LBCL C391[6], C392[6], C393[6]

Stage III

6 LBCL C490[6]

6 Chosen from LBCL C391[6], C392[6], C393[6]

In addition to completing the Core Curriculum, students must meet the Faculty of Arts and Science degree requirements and complete a departmental Major, Specialization, or Honours programme, or the Individual Studies Programme or the Major in L.A.C. Western Society and Culture.

The Core Curriculum may also be applied towards Specialization or Honours work in the Individual Studies Programme. (See §31.170 of this calendar).

All College students must consult with a College adviser before selecting courses in other disciplines or fields. Generally, courses in the Liberal Arts College are open only to members of the College.

Honours candidates must maintain a "B" average in their College courses, with no grade lower than a "C". Students in a Major or Specialization programme must maintain a "C" average in their College courses, with no grade lower than a "D".

42 BA Major in Western Society and Culture

Stage I

18 LBCL C291[6], C292[6], C293[6]

Stage II

12 Chosen from LBCL C391[6], C392[6], C393[6]

Stage III

6 Chosen from LBCL C391[6], C392[6], C393[6]

6 LBCL C490[6]

The College advises students who are enrolled in the BA Major in Western Society and Culture to take, in addition, some form of concentrated study (Major, Minor, etc.) within a single department or field of study.

Further information on core courses and College programmes generally may be obtained either by writing for the Liberal Arts College Informational Brochure or calling the Liberal Arts College, Concordia University, 1455 de Maisonneuve Blvd. W., Montreal, Quebec, H3G 1M8, tel: 879-2565. Personal interviews with a Fellow of Liberal Arts College may be arranged through the Secretary.

Admission into a Departmental Honours Programme requires the approval of the Department.

Students seeking admission to a Departmental Honours Programme will be bound by the Honours requirements outlined in §16.2.4 of this calendar.

COURSES

LBCL C291 ***Structure and Dynamics of Western Civilization*** (6 credits)4

Prerequisite: Registration in the Liberal Arts College, or permission of the College. A study of the changing relations between productive structures, socio-political institutions and cultural traditions from antiquity to the present. This course emphasizes the analysis of social change over time, and

requires reading in a variety of primary sources and secondary materials. Primary sources such as Aristotle's *Politics*, Aquinas' *Summa Theologiae*, and Rousseau's *Social Contract*, and works such as Marc Bloch's *Feudal Society*, and Eric Hobsbawm's *Age of Revolutions* will be read.

LBCL C292 ***Modes of Expression and Interpretation*** (6 credits)
Prerequisite: Registration in the Liberal Arts College, or permission of the College. A survey of major Western literary, religious, and philosophical traditions, involving the reading and interpretation of significant primary texts from antiquity to the contemporary period. Emphasis is placed on development of writing skills and interpretive analysis. Works such as the *Odyssey*, Plato's *Republic*, Goethe's *Faust*, and Milton's *Paradise Lost* will be studied.

LBCL C293 ***Art and Aesthetic Experience*** (6 credits)
Prerequisite: Registration in the Liberal Arts College, or permission of the College. An integrated course in the nature and development of music and the visual arts, with work in criticism and aesthetic theory. The course examines artistic and musical expressions through thematic and chronological approaches and includes attention to issues concerning the creative process and the relation of art to society. Slide viewing and music listening are part of the course.

LBCL 298 ***Liberal Arts College Selected Topics*** (3 credits)

LBCL 299 ***Liberal Arts College Selected Topics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

LBCL C391 ***Contemporary Civilization*** (6 credits)
Prerequisite: LBCL C291; LBCL C292; LBCL C293, or permission of the College. Analysis of the dynamic relations between individual, state, and society in the nineteenth and twentieth centuries. Classical perspectives and contemporary analysis derived from the social sciences will be brought to bear on selected social, economic, ideological, and political problems. Students will read from such works as Hegel's *Phenomenology*, M. Weber's *Economy and Society*, Marx's *Capital* and S. Freud's *Interpretation of Dreams*.

LBCL C392 ***The Sciences In Society*** (6 credits)
Prerequisite: LBCL C291; LBCL C292; LBCL C293, or permission of the College. An introduction to the nature, development, organization, and social consequences of the scientific enterprise. Issues in the philosophy, sociology, and history of science, as well as in the relation of technology to science and to society, are emphasized. Works such as E.R. Dodds, *The Greeks and the Irrational*, T.S. Kuhn, *The Structure of Scientific Revolutions*, and R.K. Merton's *Science, Technology and Society*, will be read, as well as a number of original sources such as Aristotle's *Physics*, Bacon's *The New Organon* and Darwin's *Origin of Species*.

LBCL C393 ***Contemporary Modes of Expression and Interpretation*** (6 credits)
Prerequisite: LBCL C291; LBCL C292; LBCL C293, or permission of the College. An advanced seminar organized on a topical and thematic basis and emphasising intensive, sustained analysis of a limited number of fundamentally important literary, religious, and philosophical works. Stress is placed on bringing critical and interpretative approaches to bear on nineteenth- and twentieth-century texts in a series of extended written papers. It permits the requisite sustained analysis of authors such as Nietzsche, Yeats, Beaudelaire, Kierkegaard, Mann, and Joyce.

LBCL 398 ***Liberal Arts College Selected Topics*** (3 credits)

LBCL 399 ***Liberal Arts College Selected Topics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

LBCL C490 ***Integrative Seminar*** (6 credits)
Prerequisite: Two of LBCL C391, C392, C393, or permission of the College. The College research seminar will relate the student's disciplinary or area specialization to the general perspectives of the Liberal Arts College Core Curriculum. The seminar topic will vary from year to year, and students will be required to produce a significant research paper.

LBCL 498 ***Liberal Arts College Advanced Topics*** (3 credits)

LBCL 499 ***Liberal Arts College Advanced Topics*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.530 Lonergan University College

Principal
M. DOUGHTY, *Associate Professor Chemistry*

Fellows
Sr. P. ALLEN, *Associate Professor, Philosophy*
S. ALVI, *Associate Professor, Economics*
W. BOTTENBERG, *Associate Professor, Music*
C. DAVIS, *Professor, Religion*
M. FAHEY, *Professor, Theological Studies*
C. FONDA, *Professor, Modern Languages and Linguistics*
A.-M. KETTER, *Associate Professor, Modern Languages and Linguistics*
D. KETTERER, *Professor, English*
N. KLEIN, *Associate Professor, Sociology and Anthropology*
M. SHAMES, *Associate Professor, Psychology*
M. TAYLOR, *Assistant Professor, Applied Social Science*

Associate Fellows
M. BROSS, *Associate Professor, Psychology*
M. GUTIERREZ, *Sessional Lecturer, Modern Languages and Linguistics*
N. HUMBER, *Sessional Lecturer, Art Education*
J. RYAN, *Associate Professor, Theological Studies*
I. SMITH, *Associate Professor, History*

Dedication

Lonergan University College is named in honour of Dr. Bernard F. Lonergan, a former student, and later a professor of Loyola College, Montreal. Dr. Lonergan's work has been recognized throughout the world and is the subject of several hundred books and dissertations. Recently, an international *Journal of Lonergan Studies* has been initiated in the United States.

General Philosophy

Lonergan University College exists for those of us, both students and professors, who believe in an education beyond the current tradition of depersonalized and compartmentalized knowledge. Lonergan students maintain a regular department-based programme of studies. At the same time, however, they share with others the dynamics of human enquiry that transcends the narrowness of disciplinary methodologies. The unique educational experience at Lonergan can be approached by two questions: what is it that we study and how do we accomplish such a study?

Inquiry into "Value"

The Fellows of Lonergan University College are convinced that the deepest issues of life are implicitly involved in all the academic disciplines, and that both honesty and sanity demand that we attend to this fact and reflect upon it.

The subject matter chosen for the College Seminar (LUCC 399) serves as a focus for each year's activity. There are no limits to the choice of a particular thinker except that he or she be considered as among the foremost in shaping western civilization. In each choice, however, the scholarship is clearly concerned with values: they may be values centred on the question 'should it be done?' as opposed to 'can it be done?'; they may be values so entrenched in fundamental assumptions as to appear self-evident and beyond argument; or they may be values considered by some to be ultimate and beyond rational understanding. In each case, the value systems are exposed and critically analyzed, allowing the individual to come to his or her own conclusions.

Method

The College has adopted an educational strategy which is interdisciplinary and empirical.

This strategy is *interdisciplinary* and multi-disciplinary because central and ultimate issues of human life are involved in all disciplines; yet many of these issues overlap the traditional boundaries of knowledge and must be analyzed without the dominance of any one perspective.

This strategy is *empirical* in the sense that all knowing begins with enquiry about experience of the world and of ourselves as subjects. Resulting judgement of truth and value must be verified through a methodologically precise appeal to this experience. Following this strategy, Lonergan students use their departmental study as a resource to be shared and extended by working with students and fellows from other departments on a common intellectual project as determined by one of the Lonergan courses.

The work and method of Bernard Lonergan are studied by many of our students. His influence is reflected in the concept of education at the College whether or not students choose to study his work explicitly.

The Style of the College

Lonergan University College offers its students all the resources of Concordia University. Lonergan students take a regular degree programme in the department of their choice on either of the two campuses of Concordia University. Moreover, the College aims to contribute to a style of life which will heighten intellectual experience and enrich personal growth during the student's university years. It does this, not by claiming to "raise standards", but rather by demanding that its students relate what they learn to their personal lives and deeper values.

A university is the place where the universe should be discussed and intellectually appropriated. Conversation, as much as courses or research, is at the heart of university life. It is precisely this aspect of university life that has been undermined in this century by the incredible growth in knowledge itself, and by the proliferation of specialities. What universal knowledge is now possible? What do students have in common to discuss?

Lonergan University College believes that there is something in common to be discussed, and dedicates its resources to assure the depth and vitality of that discussion. It involves all its members, both students and Fellows, in structured conversation that will grow in breadth and meaning through the three years of a student's university career.

Membership

1. Students usually join the College on a continuous basis by undertaking the College Programme outlined below. This commitment constitutes full membership in the College, and it may be made when the student is first admitted to the College or at a later date. Full members are assigned an academic adviser though they may wish to seek counselling from any of the Fellows should they so wish.
2. Concordia students may also join the College on a yearly basis by registering in one of the College Seminars. Annual membership entitles students to use the College lounges and facilities and to participate in the social activities of the College.
3. Students who complete the Programme will be graduated officially as Lonergan students and will have this fact noted on their transcripts.

Academic Programme

1) Most distinctive in the College Programme is the unique opportunity for students and Fellows to participate each year in a College Seminar.

2) The Lonergan curriculum may be described as a programme of general education, which focuses on 'values'. Such a study, which is both interdisciplinary and integrative in nature, is designed to complement the student's regular programme of specialized education.

3) Students must meet the degree requirements of the Faculty of Arts and Science, and complete either a departmental or interdisciplinary Major, Specialization or Honours programme.

4) The Lonergan Programme consists of 24 credits outside the above Major, Specialization or Honours. These 24 credits may be taken as follows:

   I) College Seminars (18 credits)

      a) These credits may be amassed over 3 or more years by a succession of 6-credit and/or 3-credit seminars.

      b) Students who are admitted to the College after completing 30 credits at Concordia will be required to complete only 12 credits in College Seminars.

   II) College courses (6 credits)

      a) These courses must be selected in consultation with the student's academic adviser in the College. They may be taken in College Courses listed below, or else from the list of Lonergan-approved electives established each year by the College Curriculum Committee.

      b) Late entrants to the College who have been exempted from seminar credits under I b) above, may complete their general requirements of 24 credits by substituting additional College courses or Lonergan-approved elective courses.

College Facilities and Activities

The College is situated on the Loyola Campus of Concordia University; at 7302 Sherbrooke Street West.

The College is governed by a set of by-laws, and by a College Council composed of students and Fellows.

The central activity of the College is its weekly seminar. The seminar focuses each year on the work of a major thinker, one who has decisively influenced our culture for good or for evil. The topic will change each year, but the depth of human integration and social awareness of the authors we choose ensures continuity in our discussion. As participants in the seminar are competent in diverse academic disciplines, an understanding of the topic develops which on the one hand does justice to

the diversity of contemporary awareness, and on the other demands levels of understanding which transcend technical jargon. An internationally recognized scholar will be invited to come to Lonergan University College as the "Distinguished Visiting Scholar", to lead the College Seminar. The Visiting Scholar will also give university lectures and public addresses, as seem appropriate.

Each student of Lonergan University College joins with a small number of others to form a seminar group. College Fellows will direct the group and be available for academic advising to students. These groups will meet for two hours every week.

Students and Fellows will be encouraged to share in College government, to participate in College events, and, in various ways, to make the College the centre of their lives at the University.

The College offers a comfortable lounge, a specialized library, and several quiet rooms for study. It also has a research centre for Longergan studies with a complete set of manuscripts, and of published works.

Admissions and Applications

Students seeking admission to the College should fill in the appropriate section (Box D) of the University Admissions Application form. Interested students may also contact the College directly by telephoning 848-2280, or by coming to the College, 7302 Sherbrooke Street West (corner of Sherbrooke and West Broadway Avenue), or else by writing to the College at the following address: 7141 Sherbrooke Street West, Montreal, Quebec, H4B 1R6. Each candidate for admission will be invited to an interview with one of the College Fellows.

COURSES

LUCC 398 ***Special College Seminar*** (3 credits)
Students who for good reason cannot follow the regular College Seminar (LUCC 399) will meet every second week for two semesters or every week for one semester, under the direction of a College Fellow. The same text will be read as in the regular seminar, and the discussion will have the same aim.

LUCC 399 ***Lonergan College Seminar*** (6 credits)
A different work will be selected by the College Council each year from among those classics which have shaped our civilization. In the past the following were selected: Bernard Lonergan, Carl Jung, Northrop Frye, Niccolo Machiavelli, Teresa of Avila and Charles Darwin. The seminar meets each week through two semesters, to read segments of the work in appropriate intellectual contexts, and to move eventually to a personal, value-oriented, dialectic with the work. One week the Fellows discuss with the Visiting Scholar with limited student participation. The following week students meet in small groups with individual Fellows to deepen and broaden discussion.

LUCC C400 ***Generalized Empirical Methods*** (3 credits)
This course will engage students in the task of integrating their university discipline into the more general enterprise of human knowing and deciding. Students will reflect on their personal experience of knowing and deciding, and will attempt to objectify this experience with the aid of a basic study of generalized empirical methodology. The text will be selected from the works of Bernard Lonergan or of other comparable theorists.

LUCC C410 ***Introduction to the Works of Bernard Lonergan*** (3 credits)
A selection of Lonergan's works will be read and discussed.

LUCC 498 ***Lonergan University College Selected Problems*** (3 credits)
Prerequisite: 60 credits; 12 credits from LUCC 398 or LUCC 399; and permission of the Principal. Courses offered under this title will investigate appropriate problems in the Humanities, Social Sciences and Natural Sciences from an interdisciplinary perspective.

LUCC 499 ***Lonergan University College Selected Topics*** (6 credits)
Prerequisite: 60 credits; 12 credits from LUCC 398 or LUCC 399; and permission of the Principal. Courses offered under this title will investigate appropriate topics in the Humanities, Social Sciences and Natural Sciences from an interdisciplinary perspective.

31.540 School of Community and Public Affairs

Acting Principal
D. SHAPIRO, *Associate Professor, Economics*

Fellows
H. CHORNEY, *Assistant Professor, Political Science*
L. CRYSLER, *Director, Journalism*

Associate Fellow
M. HERSHORN, *Associate Professor, Political Science*

Resident Fellows
G. CARR, *Assistant Professor, History*
H. GUINDON, *Professor, Sociology and Anthropology*

Objectives of the School

Community and Public Affairs is a diverse and rapidly growing field of activity. In general, it includes the institutions and processes through which concerned citizens and organized groups interact so as to improve the collective well-being of their communities. The many professionals who work in this area are concerned with community building in all its dimensions.

The purpose of the School of Community and Public Affairs is to prepare candidates for positions either in the public or private sectors as public affairs specialists. The School will also prepare students who wish to pursue post-graduate work in public affairs or public administration. The curriculum aims at the blending of vocational and scholarly values so as to produce graduates who are well educated in a broad sense.

Students enrolled in the School will benefit from a unique combination of the following components:

1. an internship programme within which students will receive credit for working in a public-affairs-related job;
2. a bilingual (French-English) environment within which to pursue their studies;
3. a combination of a Major, Specialization, or Honours in a discipline (History, Sociology, etc.) with what is essentially a multidisciplinary programme;
4. a common institutional setting for colloquia, discussion, and study relevant to community and public affairs.

One of the primary aims of the School is to provide an environment that is conducive to discussing and learning about public affairs. We believe, therefore, that what students do outside of formal courses is as important as the classroom experience itself. The historic building which the School now occupies is ideal inasmuch as it facilitates personal contact and easy communication between students and visiting practitioners. School facilities include a common room, reading room and documentation centre, a seminar room, faculty and student offices.

The School also houses the independent Institute for Research on Public Policy, one of Canada's best-known policy institutes. Students will benefit from on-going contact with the Institute's research personnel and from the extensive resources which it brings to the School.

The School Programme

Students who enrol in the School of Community and Public Affairs will follow a programme composed of the following elements:

1. The Core Courses
(36 credits)

All students must take the following:

ECON C201 Introduction to Microeconomics (3 credits)

ECON C203 Introduction to Macroeconomics (3 credits)

HIST C203 History of Canada, Pre-Confederation (3 credits)

HIST C205 History of Canada, Post-Confederation (3 credits)

POLI C250 Canadian Government and Politics (6 credits)

SOCI C203 Introduction to Society (3 credits)

SCPA C301 Modular Seminar I (3 credits)

SCPA C401 Modular Seminar II (3 credits)

SCPA C411 Internship (3 credits)

SCPA C412 Internship Research Project (3 credits)

2. The Disciplinary Programme

Members of the School of Community and Public Affairs must also pursue a departmental or interdisciplinary Honours, Specialization or Major programme.

Performance Requirement and Exemptions Policy

Students are required to maintain an overall average of 70%. In addition, all members of the School of Community and Public Affairs are expected to participate fully in the operation of the School.

Where exemptions are granted for any of the core courses, students are required to replace them with an equal number of credits chosen in consultation with the SCPA adviser.

Entrance Requirements

Students admitted to the University and seeking to enter the School must have achieved a "B" average, or the equivalent at the previous educational level. Students wishing to enter the School will be interviewed personally. In exceptional circumstances, a candidate who has failed to meet the grade requirement will be admitted on the basis of a personal evaluation of potential capacities, as against those realized in previous studies. Each student enrolled in the School will have to demonstrate a working knowledge of English and French.

For further information on curriculum, programmes, personnel, and objectives, please call the Principal, at 848-2575.

COURSES

SCPA 298 ***Selected Topics in Community and Public Affairs*** (3 credits)

SCPA 299 ***Selected Topics in Community and Public Affairs*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SCPA C301 ***Modular Seminar I*** (3 credits)
Prerequisite: Permission of the School of Community and Public Affairs. Under the direction of a Resident Fellow, the Seminars, which will be presented by practising professionals drawn from public or private agencies, will consist of a series of "modules" of approximately 3 weeks duration. The modules will be problem oriented and will focus on specific functions and areas in public affairs in order to equip students with a range of skills needed to pursue careers in the field. Topics will vary from term to term and may include: Leadership, Decision-Making, Budgeting, Programmme Evaluation, Human Resource Development, Motivation, Conflict Resolution, Planning and Forecasting, Ethics and Public Choice, Intergovernmental Relations.

SCPA 398 ***Special Area Study in Community and Public Affairs*** (3 credits)

SCPA 399 ***Selected Topics in Community and Public Affairs*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SCPA C401 ***Modular Seminar II*** (3 credits)
Prerequisite: SCPA C301 and permission of the School of Community and Public Affairs. This seminar will normally be taken by students in their second year. Under the direction of a Resident Fellow seminars will be presented by practising professionals drawn from public or private agencies. The modules will be problem oriented and will focus on specific functions and areas in public affairs in order to equip students with a range of skills needed to pursue careers in the field.

SCPA C411 ***Internship*** (3 credits)
Prerequisite: Permission of the School of community and Public Affairs. An essential part of the School's programme is a one-semester apprenticeship in some aspect of community and public affairs. After completing 60 credits of the BA programme, including a significant portion of the School's core, students are required to complete a practicum that will allow them to test their ideas in a real situation. Placements may be drawn from all areas of possible employment, including the private sector, government and community service organizations. Students are expected to participate fully in finding and defining possible internships. Employers will be asked to join in an evaluation of the work period.

SCPA C412 ***Research Project*** (3 credits)
Prerequisite: SCPA C411. Students who have completed their internship are required to prepare a

research brief on some aspect of their practical experience. After consulting with employers and tutors, students will select a topic or problem relevant to the job they performed. They will undertake such research and analysis as may be required by the nature of the topic and will submit their findings in a written report at the end of the academic session. Successful completion of the course will involve an oral presentation of the brief to a seminar of Fellows and Associates of the School. In unusual circumstances, SCPA C412 may be taken concurrently with SCPA C411 with permission of the School.

SCPA 498 ***Advanced Seminar in Community and Public Affairs*** (3 credits)

SCPA 499 ***Advanced Topics in Community and Public Affairs*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.550 Science College

Principal
P.R. WALLACE

Fellows
P. ALBERT, *Associate Professor, Biology*
P. BIRD, *Professor, Chemistry*
W. BYERS, *Associate Professor, Mathematics*
N. EDDY, *Associate Professor, Physics*
T. GRAY, *Associate Professor, Psychology*
S. KUMARAPELI, *Associate Professor and Chairman, Geology*
C. LANGFORD, *Professor and Chairman, Chemistry*
E. MALY, *Associate Professor and Chairman, Biology*
J. McKAY, *Professor, Computer Science*
S. MULLETT, *Assistant Professor, Philosophy*
E.B. NEWMAN, *Professor, Biology*
R.C. SHARMA, *Associate Professor, Physics*
P. SHIZGAL, *Professor, Psychology*
J. STEWART, *Professor, Psychology*
M. SZABO, *Professor, Mathematics*

In Science College, students will gain an understanding of several areas of science, while specializing in whichever one they choose. Curricular structures frequently restrict students to a single discipline. To help counteract excessive specialization, the Science College has designed a series of courses to show what practising physicists think about physics; what mathematicians do when they are thinking mathematics: - not "an introduction to", but "the state of the art".

The College provides an opportunity for students to become acquainted with science as practised and understood by scientists today. Its curriculum is planned to fulfill the primary goals of the College - to provide an opportunity for experience in a research environment, for thinking about the nature of science, and for becoming aware of the style and content of the various scientific disciplines.

In Science College, students have the opportunity to work individually with active research scientists. This is done through a programme of directed or independent study in each undergraduate year which enables them to undertake or participate in projects of discovery in a variety of different areas of scientific endeavour.

Students of the College will also be provided with an opportunity to consider the nature of science. The College offers courses in the intellectual and social context of science. Designed specifically for College students, these courses raise questions of broad interest to scientists and presume an understanding of the subject matter of science itself.

Students will also be given the opportunity to consider the social and cultural framework of their science studies through a basic course in some aspect of humanistic studies. This will bring them into intellectual contact with students in our fellow College of Liberal Arts.

Finally, students will be encouraged to appreciate the link between clarity of thought and clarity of expression, through the availability of tutorial assistance in the development of writing skills.

Facilities

The College has its own premises located on the twelfth floor of the Hall Building at the downtown Sir George Williams Campus. The College offers students the opportunity and facilities to discuss matters of interest among themselves and with their professors. Science College also offers a number of courses and invites scientists to visit the University to meet College students.

Requirements for Admission to Science College

The programme of Science College is academically demanding, involving concentration in one discipline and a critical investigation of other aspects of science. The College is committed to serious academic work and high standards, and seeks to attract talented and enthusiastic students who are willing to work hard in a search for a deeper understanding of their subject.

Science College represents a new departure at Concordia's downtown campus. Students must enrol in a science programme that leads to a B.Sc. degree in order to be part of Science College. Students registered for a B.A. in Journalism are also eligible, as are students registered in the General Science Option of Computer Science.

In addition to the normal requirements for admission to the University's various programmes, applicants are expected to have a good academic average. They will be considered on the basis of their academic record, and a personal interview. Preference will be given to students who show a disposition and an aptitute to profit from the unique features of the sort of fundamental scientific education which the College offers. Applicants are encouraged to provide evidence of the range of their intellectual interests and of any creative activity in which they may have been involved.

Students must be prepared to attend courses at times outside the normal University schedule. The College is open to full-time students only.

Science College and Journalism

A limited number of students who have been admitted to the Major in Journalism programme may be allowed to register in the Science College, with a view to combining a basic understanding of science with a training in journalism. For such students, a second six-credit course in the historical, philosophical, and social aspects of science will be offered. Other members of the College will have the option of taking this course if they so desire.

Performance Requirement

Students in the College must maintain a "B" average in courses offered by the College, with no grade lower than a "C".

Further Information

Further information on the courses and activities of the Science College may be obtained either by writing to:

Concordia University
Science College
Room H-1260
1455 de Maisonneuve Blvd., West
Montreal, Quebec H3G 1M8

or by telephoning the College office at 848-2595. Personal interviews with a Fellow of the Science College may be arranged through the Science College office.

Science College Core Curriculum

The College offers a core of courses which are required of all students. This core consists of 30 of the 90 credits normally required for a B.Sc. degree. These courses have been developed specifically for the College with the intention of providing a unique, integrated programme of education in science.

PROGRAMMES

In addition to completing the Core Curriculum, students are responsible for satisfying their particular degree requirements by completing a departmental Honours, Specialization, or Major programmme leading to a B.Sc.

The superscript indicates credit value.

30	**Science College Curriculum**
3-6	SCOL C251^3, C252^3, C253^3
6	SCOL C270^6
0-6	Chosen from LBCL C291^6, C292^6, C293^6
6	SCOL C290^3, C390^3
6	SCOL C490^6
3-9	SCOL 398^{3*}

**This course may be repeated twice for credit in this programme provided the subject matter is different.*

COURSES

SCOL C251 ***Current Issues in Physical Science*** (3 credits)
Prerequisite: Membership in the Science College, or permission of the College.

SCOL C252 ***Current Issues in Biological Science*** (3 credits)
Prerequisite: Membership in the Science College, or permission of the College.

SCOL C253 ***Current Issues in Mathematical and Social Sciences*** (3 credits)
Prerequisite: Membership in the Science College, or permission of the College.

SCOL C270 ***Historical, Philosophical, and Social Aspects of Science*** (6 credits)
Prerequisite: Membership in the Science College, or permission of the College. This course will discuss the intellectual framework of science and the relationships between science and society, and the political and philosophical questions inherent in the scientific process. This course is primarily intended for College students and will rely heavily on primary sources. Students will be expected to understand the scientific issues at the level at which they were originally addressed.

SCOL C290 ***Directed and Independent Study I*** (3 credits)
Prerequisite: Membership in the Science College, or permission of the College. The student will work under the supervision of a member of the Faculty on either a practical laboratory project or a literature study. A formal, written report will be required.

SCOL 298 ***Selected Topics in a Scientific Discipline*** (3 credits)
(Will not be offered in this academic year.)

SCOL 299 ***Selected Topics in a Scientific Discipline*** (6 credits)
(Will not be offered in this academic year.)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SCOL C390 ***Directed and Independent Study II*** (3 credits)
Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL C290 registers for SCOL C390. Students will be encouraged to work in a field different from that of their SCOL C290 project.

SCOL 398 ***Topics for Multidisciplinary Study*** (3 credits)
A different topic may be covered in each academic year. Students may repeat this course twice for credit provided the subject matter is different.

SCOL 399 ***Topics for Multidisciplinary Study*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

SCOL C490 ***Directed and Independent Study III*** (6 credits)
Prerequisite: Membership in the Science College, or permission of the College. A student who has completed SCOL C390 registers for SCOL C490. Students will be encouraged to work in a field different from that of their SCOL C290 and C390 projects. Students will complete a research project approved in advance by the College, under the supervision of a Fellow of the College and/or a faculty member in a scientific discipline.
NOTE: After consultation with the Science College, a student may register in BIOL C490, CHEM C450, GEOL C414 or PSYC C430 and upon successful completion be exempted from SCOL C490.

SCOL 498 ***Advanced Topics*** (3 credits)
(Will not be offered in this academic year.)

SCOL 499 ***Advanced Topics*** (6 credits)
(Will not be offered in this academic year.)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

31.560 The Simone de Beauvoir Institute and Women's Studies

Administrator
E. GARDHAM

Fellows
K. ANAND, *Associate Professor, Mathematics*
J. BYERS, *Assistant Professor, Art Therapy*
N. DORAY, *Legal Information Services*
L. DYER, *Assistant Professor, Management*
E. EGAN, *Associate Professor, Philosophy*
B. FREIWALD, *Assistant Professor, English*
J. GELLERT, *Counsellor, Guidance Services*
R. GREENBERG, *Associate Professor, Art History*
E. HENRIK, *Assistant Professor, Psychology*
A. KIRBY, *Dean of Students Office*
J. LEVITIN, *Assistant Professor, Cinema and Photography*
F. LIGIER, *Associate Professor, Etudes françaises*
B. MacKAY, *Assistant Professor, Theatre*
C. MacKENZIE, *Assistant Dean, Fine Arts*
S. McDONOUGH, *Professor, Religion*
M. PETRIE, *Associate Professor, Teaching of English as a Second Language*
J.S. SEN, *Assistant Professor, Management*
D. SHEPPARD, *Assistant Professor, Sociology and Anthropology*
S. SIMON, *Assistant Professor, Études françaises*
J. VELLACOTT, *Visiting Assistant Professor*
K. WATERS, *Associate Professor, English*
T. WAUGH, *Associate Professor, Cinema and Photography*
J. WOODSWORTH, *Assistant Professor, Études françaises*

Adjunct Fellows
M. PELUSO, *Political Science*
S. PETERS, *Sociology and Anthropology*
C. WATSON, *Sociology and Anthropology*

SIMONE DE BEAUVOIR INSTITUTE

Founded in 1978 to promote the understanding of the historical and contemporary situation of women in society, the Simone de Beauvoir Institute of Concordia University helps women to discover and develop their potential, both by its academic base in Women's Studies and by its co-curricular activities. We are honoured that Simone de Beauvoir has authorized us to use her name and has expressed great interest in being informed of our current and future activities.

All students registered in the Major, Minor or Certificate in Women's Studies are normally members of the Institute. Other undergraduate students are welcome to become members if they undertake to complete nine credits of WMNS and SDEB courses. Members are expected to contribute to the activities of the Institute.

The co-curricular life of the Institute is extremely important, and all members are expected to contribute to our activities. Exciting opportunities are available to organize workshops, colloquia and debates on subjects which interest the members, as well as to collaborate with women's organizations outside the University on research projects and other joint ventures in which we can benefit from the experience of others.

Admission Requirements for the Simone de Beauvoir Institute

Students apply simultaneously to Concordia University and the Simone de Beauvoir Institute by filling out and submitting the Concordia University Application for Admission with the box for "colleges" checked and "Simone de Beauvoir Institute" written in the space provided. The Admissions Office will inform us of your application as soon as they receive it. Further information about the Institute can be obtained by calling us at 848-2370 or by visiting our offices.

Student members of the Institute are required to complete nine credits chosen from among the Simone de Beauvoir Fellows' Seminars and the Women's Studies courses. The choice of these courses must be approved in advance by the Principal or her delegate.

Location

The main centre for the Institute is 2170 Bishop Street on the Sir George Williams Campus. It includes faculty and secretarial offices, a lounge, a reading and a seminar room; there is also a resource centre on the Loyola Campus.

COURSES

SDEB 398 ***Fellows' Seminar I*** (3 credits)
Prerequisite: Second-year standing and permission of the Institute. The aim of this course is to encourage students to acquaint themselves with current theoretical issues and areas of research related to women. The course will be given by the Fellows, either individually or jointly, according to their special interests and qualifications.

WOMEN'S STUDIES

Women's Studies encompass and modify all areas of knowledge. Through the introduction of new perspectives and new research, this field of study helps to correct and complete the traditional scholarly record. It is in essence interdisciplinary and multidisciplinary since the specificity of the condition of women embraces all existing disciplines. It thus questions the concept and structures of knowledge contained within the disciplinary boundaries and contributes to bringing about a reunification of the knowledge and scholarship that has become increasingly fragmented.

The objectives of programmes in Women's Studies may be summarized as follows: to raise fundamental questions about women in society, using a scientific and academic approach; to stimulate interest in and support of research topics relevant to women and social change; to investigate our socio-political and cultural backgrounds and their effect on the status of women; to engage in a continuous evaluation of research into the history, conditions and changing needs of women; to promote the understanding of the historical and contemporary role of women in society; to encourage a new and full recognition of the contribution of women to human achievement; to ensure that women and issues of gender are studied in a non-discriminatory manner as part of the curriculum either in separate distinguishable Women's Studies courses or in courses so modified as to give women's perspective its rightful place; to strengthen and widen women's rights by providing the conditions which allow women to exercise those rights; to ensure the equality of all individuals without distinction of race, sex, age, language or religion and thus transform society.

PROGRAMMES

Students are responsible for satisfying their particular degree requirements.

The superscript indicates credit value.

Students should consult with the Women's Studies Adviser prior to registering for Women's Studies courses.

39 BA Major in Women's Studies

Group I

6 WMNS C290[3], C291[3]
6 WMNS 498[3]*
3 SDEB 398[3]**

Group II

3 WMNS 398[3]***

Group III

21 Chosen in consultation with the Women's Studies Adviser from WMNS 398[3]***; SDEB 398[3]**; FMST C329[3]; CLAS C254[3]; ECON C397[3]; EDUC C321[3]; ENGL C249[3], C250[3], C251[3], C252[3]; FRAN C451[3], C476[3], C477[3]; HIST C329[3], C331[3]; PHIL C230[3]; POLI C334[6]; PSYC C390[6]; RELI C333[3], C334[3]; SOCI C372[6]; THEO C471[3], C472[3]

**This course may be repeated once for credit in this programme provided the subject matter is different.*

***This course may be repeated twice for credit in this programme provided the subject matter is different.*

****This course may be repeated three times for credit in this programme provided the subject matter is different.*

27 BA Minor in Women's Studies

Group I

6 WMNS C290[3], C291[3]
6 WMNS 498[3]*
3 SDEB 398[3]**

Group II

3 WMNS 398[3]***

Group III

9 Chosen in consultation with the Women's Studies Adviser from WMNS 398[3]***; SDEB 398[3]**; FMST C329[3]; CLAS C254[3]; ECON C397[3]; EDUC C321[3]; ENGL C249[3], C250[3], C251[3], C252[3]; FRAN C451[3], C476[3], C477[3]; HIST C329[3], C331[3]; PHIL C230[3]; POLI C334[6]; PSYC C390[6]; RELI C333[3], C334[3]; SOCI C372[6]; THEO C471[3], C472[3]

**This course may be repeated once for credit in this programme provided the subject matter is different.*

***This course may be repeated twice for credit in this programme provided the subject matter is different.*

****This course may be repeated three times for credit in this programme provided the subject matter is different.*

30 Certificate in Women's Studies

Group I

6 WMNS C290[3], C291[3]
6 WMNS 498[3]*
3 SDEB 398[3]**

Group II

15 Chosen in consultation with the Women's Studies Adviser from WMNS 398[3]***; SDEB 398[3]**; FMST C329[3]; CLAS C254[3]; ECON C397[3]; EDUC C321[3]; ENGL C249[3], C250[3], C251[3], C252[3]; FRAN C451[3], C476[3], C477[3]; HIST C329[3], C331[3]; PHIL C230[3]; POLI C334[6]; PSYC C390[6]; RELI C333[3], C334[3]; SOCI C372[6]; THEO C471[3], C472[3]

**This course may be repeated once for credit in this programme provided the subject matter is different.*

***This course may be repeated twice for credit in this programme provided the subject matter is different.*

****This course may be repeated three times for credit in this programme provided the subject matter is different.*

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

COURSES

NOTE: Please consult §200.1, Equivalents, for a list of equivalent courses.

WMNS C290 ***Woman's Identity and Image: Historic Attitudes*** (3 credits)
Women's Studies, because of its emerging yet rapidly developing nature, both affects and transcends pre-existing disciplines. On the one hand, this course will show, in a historical context, how by the use of new developments in various disciplines, fresh light can be shed on traditional assumptions. On the other, it will study not only the "mirror image" of women as found in certain male writings but also the images women have projected of themselves and the reasons underlying those projections. Topics may include: the witch question; the place of women in ecclesiastic reforms; the "blue stockings"; women and contraception; women and public life; women and education; women and socialism; theories of the family; the economic status of women; elitist feminism.
NOTE: Students who have received credit for INTE C290 may not take this course for credit.

WMNS C291 ***Woman's Identity and Image: Recent Approaches*** (3 credits)
Again, by using new tools, culled from various disciplines, this course will look at the recent history of women; in particular, the diverse ways in which they have struggled to attain autonomy and the obstacles confronting them. Topics may include: women and revolution; women and work; theories of caste and class; changes in the status of women; women and personhood; women and their bodies; women and language; women and the national question.
NOTE: Students who have received credit for INTE C291 may not take this course for credit.

WMNS 298 ***Selected Topics in Women's Studies*** (3 credits)

WMNS 299 ***Selected Topics in Women's Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

WMNS 398 ***Selected Topics in Women's Studies*** (3 credits)
NOTE: Students who have received credit for INTE C390 may not take this course for credit.

WMNS 399 ***Selected Topics in Women's Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

WMNS 498 ***Seminar in Women's Studies*** (3 credits)
NOTE: Students who have received credit for INTE C491 may not take this course for credit.

WMNS 499 ***Seminar in Women's Studies*** (6 credits)

Specific topics for these courses, and prerequisites relevant in each case, will be stated in the Course Timetable.

The following departmental courses are also offered as components of the programmes in Women's Studies.

Cinema and Photography
FMST C329 Women and Film (3 credits)

Classics
CLAS C254 Women in Classical Antiquity (6 credits)

Economics
ECON C397 Economics of Discrimination (3 credits)

Education
EDUC C321 Sex-Role Socialization in the School (3 credits)

English
ENGL C249 Women in Literature I (3 credits)

ENGL C250 Women in Literature II (3 credits)

ENGL C251 Selected Topics in Literature Written by Women I (3 credits)

ENGL C252 Selected Topics in Literature Written by Women II (3 credits)

Français
FRAN C254 La langue et la condition des femmes au Québec (3 crédits)

FRAN C255 La langue et la condition des femmes au Québec (3 crédits)

FRAN C451 La littérature québécoise au féminin (3 crédits)

FRAN C476 La littérature française au féminin I (3 crédits)

FRAN C477 La littérature française au féminin II (3 crédits)

History
HIST C329 Women in Western History I (3 credits)

HIST C331 Women in Western History II (3 credits)

Philosophy
PHIL C230 Human Identity (3 credits)

Political Science
POLI C334 Women and the Law (6 credits)

Psychology
PSYC C390 Sexual Differentiation (6 credits)

Religion
RELI C333 Women and Religion I (3 credits)

RELI C334 Women and Religion II (3 credits)

RELI 398 Selected Topics in Religion (3 credits)

Sociology
SOCI C372 Sociology of Sex Roles (6 credits)

Theological Studies
THEO C471 Women and Christianity (3 credits)

THEO C472 The Feminine and the Female in Contemporary Christian Theology (3 credits)

With approval of the Programme Adviser.
NOTE: Students should consult the appropriate departments concerning possible prerequisites for the above courses.

Language/Langue
Les règlements actuels permettent à tout/e étudiant/e d'écrire ses devoirs ou examens en anglais ou en français dans tous les cours offerts, à l'exception des cours de langue. La langue d'enseignement sera normalement l'anglais.

Non-francophone students may equally submit assignments in English in Français C451, C476, and C477, as long as they are taking the course for credit in Women's Studies or as an elective, and not as part of a programme of the Département d'Etudes françaises.

CONCORDIA
UNIVERSITY
LOYOLA CAMPUS

61 Faculty of Commerce and Administration

61.10 COMMERCE AND ADMINISTRATION

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61.10 Commerce & Administration

Dean
STEVEN H. APPELBAUM

Associate Deans
CHARLES DRAIMIN *(Academic and Administrative Affairs)*
ROLAND WILLS *(Undergraduate Programmes and Student Affairs)*
BRIAN BARBIERI *(Academic and Student Affairs—Loyola Campus)*
CHRISTOPHER ROSS *(Research and PhD Programme)*

61.20 Admission Requirements

General admission requirements are listed in §13.

Specific requirements for admission to the Faculty of Commerce & Administration for students in CEGEP are Mathematics 103, 105, 203, or equivalent. Arrangements will be made in the first-year programme to give special instruction to those students who lack adequate mathematical preparation.

Individuals accepted under the provisions of the **extended credit programme** will be required to complete the following additional 30 credits within their first year:

MATH C208	3 credits
MATH C209	3 credits
MATH C211	3 credits
ENGL C211 or an appropriate alternative	6 credits
*electives	15 credits
TOTAL	30 credits

**These electives must be selected from outside the offerings of the Faculty of Commerce and Administration, but not from disciplines represented in its degree programmes.*

61.20.1 BACHELOR DEGREE PROGRAMMES

The Faculty of Commerce and Administration offers two distinct Bachelor programmes. The *Bachelor of Commerce (BComm)* degree is the more structured "professional" type programme in which the student will select a Major from those offered in Commerce or Economics. The *Bachelor of Administration (BAdmin)* degree is a less structured "liberal" type programme which permits the student to pursue interests outside the Faculty, and offers the possibility of complementing a fundamental grounding in Administration with minor concentrations in an area of interest. Degree requirements listed below apply to all students entering the programme on or after June 1, 1986.

61.20.2 CORE REQUIREMENTS

The required 48-credit core is identical for both programmes and comprises the following courses:

1st Year
ACCOUNTANCY C213
QUANTITATIVE METHODS C243
ECONOMICS C201
MANAGEMENT C266
MARKETING C213
ACCOUNTANCY C218
QUANTITATIVE METHODS C244
ECONOMICS C203
QUANTITATIVE METHODS C222
FINANCE C314

2nd Year
MANAGEMENT C340
QUANTITATIVE METHODS C315
MARKETING C350
MANAGEMENT C475
FINANCE C315

3rd Year
MANAGEMENT C460

NOTE: Students are responsible for following the correct sequence of courses required for the completion of a particular programme.

61.20.3 BACHELOR OF COMMERCE PROGRAMME

This programme provides the student with an education for business life. It is our intention to graduate students liberally educated about business. To accomplish this, we have designed a multi-disciplinary and interdisciplinary curriculum which is intellectually challenging.

The first year of the programme is intended to provide an informative accumulation of operational attitudes, skills, and tools which form the base for the core concentration.

The core concentration in the second year attempts to give broad experience in all phases of business in a coordinated, analytical, and reflective period of study. All the resources of the student's intellectual ability are combined with his interdisciplinary

studies to analyze, formulate, judge, and solve challenging business situations.

The last year of the programme is intended to provide students with an opportunity to immerse themselves in an area of specialized study. In addition, students participate in a course which is designed to test their ability to integrate their knowledge and to view the study of business as a whole.

In view of this design, all students must follow the sequence of the courses on the basis of an academic year as outlined in the curriculum. No student will be permitted to register for second- or third-year courses without having completed the courses of the first academic year.

Exceptions may be authorized in writing for valid reasons by the Dean or Academic Adviser.

Degree Requirements

To obtain the degree of Bachelor of Commerce, all students are required to follow a Major Programme. A Major consists of at least 24 credits in the chosen discipline in addition to the required 48-credit core. The remaining credits are unrestricted electives and may be selected to form a Minor programme if applicable. Major and Minor programmes are available in the following areas:

NOTE: There are no double majors or double minors in the Faculty of Commerce and Administration.

The Faculty may impose quotas on some majors.

CONCORDIA FACULTY OF COMMERCE AND ADMINISTRATION

*Bachelor of Commerce	*Major*	*Minor*	*Certificate*
Accountancy	X	X	
Business Studies		X[1]	X[1]
**Economics	X		
Finance	X	X	
International Business	X	X	
Management			
Administrative Management	X	X	
Human Resource Management	X		
Personnel Management		X	
Entrepreneurship & Small Business Management		X	
Managerial Law		X	
Industrial Relations	X		
Marketing	X	X	
Marketing Research		X[1]	X[1]
Quantitative Methods	X	X	
Business Statistics		X	
Management Information Systems	X	X	
Management Operations Research		X	
Production Systems		X	
Operations Research		X[1]	X[1]

Students will indicate their preferred field of concentration at the time of application for entry. It should be noted, however, that since the programme of study of the first year is common to all programmes, students may change to another programme provided, of course, that the capacity of the programme permits it.

[1]*This programme is not open to students registered in a programme leading to the degrees of Bachelor of Commerce or Bachelor of Administration.*

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Students of this Faculty who elect to major in any of the disciplines of the Faculty or Economics will be enrolled in a Bachelor of Commerce degree programme.

*Bachelor of Administration	*Specialization*
General Administration (60 credits)	X

30 credits must be selected from courses outside the Faculty of Commerce and Administration, but at least 15 credits must be beyond the introductory level.

**Both degrees have a common core of 48 credits out of a total of 90 credits.*

***Students may follow an Honours in Economics, but they must obtain approval from the Arts and Science Faculty (Department of Economics).*

61.20.4 BACHELOR OF ADMINISTRATION PROGRAMME

The Bachelor of Administration Programme is designed to develop problem-solvers and decision-makers in all walks of life.

A successful graduate is able to develop objectives and strategies, organize people and resources, direct an organization's activities and control these activities, and appraise objectives and strategies in the light of results.

The programme has been made flexible enough to allow students to develop according to their own needs.

This programme provides students with a fundamental grounding in administration and offers the opportunity to pursue varied interests among courses offered by the University.

Degree Requirements

To obtain the degree of Bachelor of Administration, students are required to complete the 48-credit core and 12 elected credits from Commerce and/or Economics to complete the 60 credits required for Specialization. The remaining 30 credits must be selected from courses outside the Faculty of Commerce and Administration, but at least half of these must be beyond the introductory level.

61.20.5 ADDITIONAL REGULATIONS FOR THE BACHELOR OF COMMERCE AND BACHELOR OF ADMINISTRATION

Definitions

Assessable courses: *All record entries of courses* listed in this Concordia calendar for which a grade point value has been assigned.

Dean's Office: Appropriate member of the Dean's office, normally, the Associate Dean, Student Affairs.

Programme of Study: Course requirements in effect at the time of the latest admission or re-admission to the degree programme, Bachelor of Commerce or Bachelor of Administration including modifications on individual basis as specified or approved in writing by the Dean's Office, or the Student Request Committee of Faculty Council.

Grade Points (GP): As defined in Section 16 of this calendar.

Weighted Grade Point Average (WGPA): This is defined as follows:

$$\text{WGPA} = \frac{\sum_{i=1}^{N} CR_i \times GP_i}{\sum_{i=1}^{N} CR_i}$$

Where CR is the credit value of the course as listed in the current calendar.

Example:

Course	Credits	Grade	Grade Points
AA	3.00	D	1.00
BB	3.00	C+	2.3
CC	3.00	B	3.00

$$\text{WGPA} = \frac{3.00 \times 1.00 + 3.00 \times 2.3 + 3.00 \times 3.00}{3.00 + 3.00 + 3.00} = 2.10$$

Academic Year: A period of time which includes a Summer and its subsequent Fall and Winter terms.

Objectives:

The objectives of these regulations are: a) to ensure that the Faculty can certify that all of its graduates are qualified to enter their profession,

b) to ensure that students can, with the assistance or intervention of the Faculty, assess themselves objectively, and plan programmes of study designed to meet their individual needs.

Regulations:

1. Students' standings are assessed at the end of each academic year providing they have registered for at least twelve credits subsequent to their previous assessment, or in the case of a first assessment, subsequent to their admission to a programme of study.

Standings of Students

a) who are being considered for the award of a degree, namely, have applied for graduation and have registered for all courses in their programme of study, and,

b) who are currently registered for fewer than twelve credits

will be determined on the basis that these constitute an extension of the last assessment period.

A grade obtained as a result of completing the work for a course graded INC or MED is included as part of the assessment period in which it is recorded.

2. Students' standings are determined according to the following criteria:

Acceptable Standing:

A WGPA of at least 2.00 with a maximum of one failure if 24.00 or fewer credits have been registered for or two failures if more than 24.00 credits have been registered for.

Conditional Standing:

A WGPA of at least 1.50 with a maximum of two failures if 24.00 or fewer credits have been registered for or three failures if more than 24.00 credits have been registered for.

Failed Standing:

Failure to meet the criteria for Acceptable or Conditional Standings.

3. Students in Acceptable Standing may proceed subject to the following conditions: any failing grade must be cleared by repeating the failed course or, in the case of an elective, by replacing the failed course by an alternative within the same group electives. Any variation must be approved by the Dean's Office.

4. Students in Conditional Standing must receive academic counselling from the appropriate member of the Dean's Office or his appointees. They may proceed subject to the following conditions:

a) They must repeat successfully all courses in which failing grades were obtained, or

replace them by alternatives approved by the appropriate member of the Dean's Office in consultation with the student's department.

b) In no case will the number of credits taken exceed fifteen per term for full-time students and six per term for part-time students.

c) They must obtain Acceptable Standing at the time of their next assessment.

5. Failed students who are not subject to regulation 6 below may apply for re-admission through the Dean's Office. If readmitted, they will be placed on academic probation. They must return to Acceptable Standing at the time of their next assessment. Other conditions will be determined at the time of re-admission.

6. Failed students who were previously classed as Failed Students must withdraw from the University.

7. *Graduation Requirement:* Students must satisfy all course requirements and be in acceptable standing. Students who fail to meet Acceptable Standing but meet Conditional Standing will have the following options:

a) Register for twelve credits and meet the Acceptable Standing.

b) Register for fewer than twelve credits. In this case standing will be determined on the basis that these constitute an extension of the last assessment period.

In both case a) and b), courses taken must be approved by the appropriate member of the Dean's Office in consultation with the student's department where necessary. Normally, these courses will be selected from the offerings of the Faculty of Commerce and Administration or Department of Economics.

These regulations will apply to all students admitted to or readmitted to a Faculty program after May 31, 1985.

61.30 General Information

Old Credit Programme (Transition)

Students who have enrolled in a programme at this Faculty prior to June 1, 1976 will complete the programme as shown in the University Announcement 1975/1976. For substitution of courses not offered in the new programme, students will consult with representatives of the respective departments.

Failures

Students are cautioned that a failure in a first-term course will prohibit them from proceeding to a second-term course for which the first is a prerequisite. Students who find themselves in this position must drop the second-term course and register in a section of the failed course, if available.

There will be a course-change period at the beginning of the second term, at which time students failing in the above category must make arrangements with the Office of the Registrar for the necessary course changes.

NOTE: THERE ARE NO SUPPLEMENTAL EXAMINATIONS IN THE FACULTY OF COMMERCE AND ADMINISTRATION.

French Language

The business community, as well as governments, now express a preference for university graduates who are bilingual. We, therefore, advise all students to take advantage of the opportunities available during their years at this University to ensure that they are bilingual when they present themselves for employment upon graduation.

Courses/Non Commerce Students

Students not registered in the Faculty of Commerce & Administration, who wish to undertake any courses offered by the Faculty, but do not have the stated prerequisites, must obtain permission in writing from the Student Request Committee, Faculty of Commerce *prior to registration.*

61.40 Accountancy

Professor and Chairman of the Department
J.D. BLAZOUSKE

Professors
C.D. ACLAND
L.M. BESSNER
R. BLOOM
R.A. LONG
H. MANN

Associate Professors
G.R. CURNEW
H.J. DAUDERIS
C. DRAIMIN
D.F. MACDONALD
E.B. MARKLAND
H.B. RIPSTEIN
F.L. SBROCCHI

Assistant Professors
M. GOLD
R. KAPOOR
G. LOWENFELD
T. MUSSER
J.-J. SEGOVIA

Lecturers
S. BEINER
D. CHARRON
G. FAYERMAN
N. LLOYD
S. ROBINSON
A. VASIL

Sessional Lecturers
P. CHARLTON
R. COLLINS
R. GUT
R. LANN
E. WERBIN

30 Major in Accountancy
3 ACCO C303
3 ACCO C323
3 ACCO C326
3 ACCO C335
3 ACCO C429
3 ACCO C441
12 additional credits offered by the Department

12 Minor in Accountancy
3 ACCO C323
3 ACCO C326
6 additional credits offered by the Department

ACCO C213 ***Introductory Financial Accounting*** (3 credits)
This course examines the theory and practice involved in recording and reporting an organization's financial information. Concepts of asset valuation and income measurement are discussed with respect to both large and small enterprises. Professional and legal requirements concerning financial statement disclosure are introduced and the needs of decision makers requiring financial information are considered. *NOTE A/See §200.2*

ACCO C217 ***Financial and Managerial*** (3 credits)
Prerequisite: ACCO C213. This course is designed to develop, through verbal analysis of business cases, an understanding and skill in the preparation of statements for financial accounting purposes, taking into account the needs of business management. The student must be able to analyze these statements and comment critically thereon. *NOTE A/See §200.2*
NOTE: Major and Honours students in Accountancy may not take this course for credits.

ACCO C218 ***Introductory Managerial Accounting*** (3 credits)
Prerequisite: ACCO C213. This course examines the development of accounting information for the purposes of planning, control, decision making, and, in general, for the more efficient operation of enterprises, large and small. *NOTE A/See §200.2*

ACCO C220 ***An Accounting Approach to Management*** (3 credits)
This course is designed to cover certain major aspects of management related to the accounting process. These include: business organization; accounting concepts; financial statement analysis; management uses of accounting information; and the effect of taxation on business decisions. *NOTE A/See §200.2*
NOTE: Commerce and Administration students may not take this course for credits.

ACCO C221 ***Accounting and Management*** (3 credits)
Prerequisite: ACCO C220. This course is sequential to ACCO C220, and examines in greater depth the areas covered in that course. *NOTE A/See §200.2*
NOTE: Commerce and Administration students may not take this course for credits.

ACCO C303 ***Cost and Management Accounting*** (3 credits)
Prerequisite: ACCO C218. This course, based primarily on lectures and problem-solving, is directed to the needs of students who contemplate careers in professional accounting as members of recognized accounting bodies. A detailed examination is made of the various techniques, systems, and procedures applicable to the managerial use of accounting information for decision-making, profit-planning, and control. *NOTE A/See §200.2*

ACCO C323 ***Intermediate I*** (3 credits)
Prerequisite: ACCO C213. This course extends, at a senior level, the material covered in earlier courses, integrating the previous work with advanced theory and application. Intensive study is made of the theory and practice of external reporting by commercial and other entities. Concepts and procedures involved in the valuation of resources are studied, as are the concepts of income determination. *NOTE A/See §200.2*

ACCO C326 ***Intermediate II*** (3 credits)
Prerequisite: ACCO C323. This course continues the intensive study of Intermediate I, with particular emphasis on obligations, funds statements, and financial statement analysis.

ACCO C335 ***Advanced*** (3 credits)
Prerequisite: ACCO C326. This advanced course is concerned primarily with corporate combinations. A study is also made of other advanced accounting areas. *NOTE A/See §200.2*

ACCO C407 ***Accounting Practice and Policy*** (3 credits)
Prerequisite: ACCO C335, ACCO C429. Areas previously or concurrently covered in the field of corporate financial reporting are extended, and current accounting literature and pronouncements of professional accounting bodies are examined. Extensive use is made of the case method of instruction. *NOTE A/See §200.2*

ACCO C410 ***Specialized*** (3 credits)
Prerequisite: ACCO C326. In this course, an examination is made of some of the specialized aspects of financial accounting. The course focuses on the application of accounting principles and theory to "unusual" business transactions and entities.

ACCO C414 ***Information Systems and Control*** (3 credits)
Prerequisite: ACCO C218. This course includes information systems theory, control theory and practice, responsibility accounting, and a survey of selected management science techniques. Through case analysis and discussions, the interrelationships between information and control systems, managerial style, and human behaviour are established. *NOTE A/See §200.2*
NOTE: Introductory-level knowledge of computer systems is recommended.

ACCO C422 ***Cost and Management Accounting (Advanced)*** (3 credits)
Prerequisite: ACCO C303. This course, through cases and problems, continues at an advanced level the study of modern cost and managerial accounting systems, and emphasizes the contemporary problems facing accountants, and their potential solutions by the use of sophisticated techniques. *NOTE A/See §200.2*

ACCO C429 ***Analytical Auditing*** (3 credits)
Prerequisite: ACCO C323: This course introduces auditing theory and its application by external and internal auditors in fulfilling their respective objectives and responsibilities. The focus is on the audit of transactions or procedures used by organizations. An analytical approach is used to discuss different accounting systems and to evaluate systems of internal control. The development and use of detailed audit procedures and audit programmes is also covered. Cases and problem solving form the basis of student involvement in this course. *NOTE A/See §200.2*

ACCO C432 ***Financial Auditing*** (3 credits)
Prerequisite: ACCO C326, C429. This course emphasizes the role of the public accountant in expressing an opinion on the financial statements of an organization. The use of audit standards, procedures, and internal control is related to the expression of an auditor's opinion. Cases and problems solving form the basis of student involvement in this course. *NOTE A/See §200.2*

ACCO C433 ***Auditing and Investigation*** (3 credits)
Prerequisite: ACCO C429. This course deals with questions related to professional accounting practices and also covers different types of management services that auditors are frequently requested to undertake. *NOTE A/See §200.2*

ACCO C441 ***Taxation I*** (3 credits)
Prerequisite: ACCO C213. This course examines the Canadian taxation structure. Emphasis is given to the income taxes levied on individuals, and includes the taxation of capital gains, employment, business, and investment income. *NOTE A/See §200.2*

ACCO C442 ***Taxation II*** (3 credits)
Prerequisite: ACCO C441. This course extends the coverage of ACCO C441 with a detailed examination of taxes on corporate incomes, and of corporate distributions. Sales taxes, succession duties, and other tax areas are also examined. *NOTE A/See §200.2*

ACCO C451 ***Computer Auditing*** (3 credits)
Prerequisite: COMP211 or equivalent, and ACCO C429. This course explores the impact of large scale computer use on the auditor and his examination of a company's records and systems of internal control. The emphasis is on helping the auditor understand when a computer can be used to assist him and how to follow through with its use. Topics covered include the different controls and techniques required in a computer system, the audit trail, approaches to computer auditing and computer application for auditing, computer and software security, and consideration of the various computerized audit packages available. *NOTE A/See §200.2*

ACCO C461 ***Accounting Theory I*** (3 credits)
Prerequisite: ACCO C335. This course examines the framework underlying current accounting thinking and procedures. A study is made of the development and the influence of professional accounting organizations and regulatory bodies on accounting theory. Controversial areas are emphasized. *NOTE A/See §200.2*

ACCO C462 ***Accounting Theory II*** (3 credits)
Prerequisite: ACCO C461. This course extends the coverage of ACCO C461. Particular emphasis is placed on developments in the current literature and in problem areas facing the accounting profession.

ACCO C468 *(Also listed under International Business)* ***International Accounting*** (3 credits)
Prerequisite: MARK C462; ACCO C218; FINA C315. (Students who have taken International Business C468 may not take this course for credit.)
This course examines accounting practices employed by different countries; accounting and financial control of international operations, and various consolidation procedures and their effect on the interpretation of financial statements are discussed.

ACCO C470 ***Special Topics in Accounting*** (3 credits)
Prerequisite: Written permission of the Department. Intended to complement and supplement accounting courses taken previously or concurrently at the senior level, this course emphasizes accounting literature and modern thought. Students are encouraged to work independently on research topics of interest to them. Enrolment is restricted and is subject to departmental approval. *NOTE A/See §200.2*

ACCO C471 ***Accounting Seminar*** (3 credits)
Prerequisite: ACCO C470. This course examines in greater depth areas of individual interest. Enrolment is restricted and is subject to departmental approval. Students repeating ACCO C471 register for credits under ACCO C472. *NOTE A/See §200.2*

61.50 Administration

ADMI C201 ***Introduction to Administration*** (Administered by the Finance Department) (3 credits)

This course is intended to develop a basic understanding of the role of administration in our society. The course includes a survey of different forms of organizations, their social and legal responsibilities, and how they function to achieve their goals.

NOTE: Commerce and Administration students may not take this course for credit.

ADMI C202 ***Perspective on Business*** (Administered by the Finance Department) (3 credits)

This course is designed to review the historical development of business (in Canada in particular) and to examine the relationships between the firm (management) and the owners, the employees, the customers, the government, and the community. Further, it studies some of the problems facing Canadian business today: the dehumanizing aspect, pollution problems, large vs. small firms, foreign ownership, competition, etc.

NOTE: Commerce and Administration students may not take this course for credits.

61.60 Finance

Professor and Chairman of the Department
D. GANDHI

Professors
L. KRYZANOWSKI
C.C. POTTER

Associate Professors
L. BOYLE
A. BRODT
B. ENGLISH
A. JALIVAND
C.S. PATTERSON
L. SWITZER

Assistant Professors
S. DESHPANDE
J. DOUKAS
A. HOCHSTEIN
J. NADER
A. RAHMAN
P. WALKER

Lecturers
A. AHMAD
S. ALCOCK-GALL
C. GUILDING

Sessional Lecturer
P. LEVENTHAL

Executive-In-Residence
P. SEVIGNY

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24 Major in Finance
3 FINA C440
3 FINA C441
18 additional credits offered by the Department

12 Minor in Finance
12 400-level credits offered by the Department

FINA C314 ***Introduction to Finance I*** (3 credits)
Prerequisite: ECON C201 and ACCO C213; corequisite: ACCO C218. A course dealing with corporate financial analysis and planning, the management and capital expenditure decisions. *NOTE A/See §200.2*
NOTE: Students who have previously taken FINA C215 may not take this course for credit.

FINA C315 ***Introduction to Finance II*** (3 credits)
Prerequisite: FINA C314 and ECON C203. A course dealing with sources of short and long-term financing, leasing, the cost of capital, capital structure and valuation, dividend policy, and expansion and failure. *NOTE A/See §200.2*
NOTE: Students who have previously taken FINA C215 may not take this course for credit.

FINA C417 ***Capital Budgeting Theory*** (3 credits)
Prerequisite: FINA C315. An examination of the criteria for efficient investments and optimum financial budgeting. *NOTE A/See §200.2*

FINA C418 ***Cost Benefit Analysis*** (3 credits)
Prerequisite: FINA C315. Private and public resource investment, planning programming budgeting systems and associated problems. *NOTE A/See §200.2*

FINA C424 ***Personal Finance Management*** (3 credits)
Prerequisite: FINA C315; MARK C350; MANA C340; MANA C475; QUAN C314 or QUAN C315*; and 45 additional credits in the BComm or BAdmin programme. This course is designed to assist the student in making rational decisions when consulting in personal financial activities. Topics to be covered include: personal budgeting, spending pattern analysis, the proper use of credit, housing, investment (both traditional and modern), tax and retirement planning. Case studies will be utilized when possible.
**For students admitted to the University effective June 1, 1986.*

FINA C430 ***Financial Management I*** (3 credits)
Prerequisite: FINA C315. A study of the role and responsibility of the senior financial officer in the achievement of current control through operational finance. A variety of case studies are used to encourage the students to develop a critical approach to the subject. *NOTE A/See §200.2*

FINA C431 ***Financial Management II*** (3 credits)
Prerequisite: FINA C430. This course is a continuation of FINA C430, using the case-method approach to cover such topics as long-term financing, investment decisions, mergers, and acquisitions. *NOTE A/See §200.2*

FINA C440 ***Finance Theory I*** (3 credits)
Prerequisite: FINA C315. This course discusses the role of research and theory in finance, and the theories of wealth allocation, interest, capital markets, and asset pricing. The discussion of these topics includes the effects of such influences as risk and inflation. *NOTE A/See §200.2*

FINA C441 ***Finance Theory II*** (3 credits)
Prerequisite: FINA C440. This course will be a continuation of FINA C440 covering such topics as: dividends and the value of the corporation, cost of capital, game theory and liquidity. *NOTE A/See §200.2*

FINA C452 ***Investment Analysis*** (3 credits)
Prerequisite: FINA C315. The examination of the workings of security markets and analytical techniques for the valuation of securities. *NOTE A/See §200.2*

FINA C453 ***Investment Management*** (3 credits)
Prerequisite: FINA C452. A study of diversification and portfolio management techniques. *NOTE A/See §200.2*

FINA C455 ***Seminar in Finance*** (3 credits)
Prerequisite: FINA C315. This course is intended primarily for Majors students and provides an opportunity for more intensive study in one or more specific topics of finance. The topic will vary according to the special interests of the professor and the students. Students repeating FINA C455 register for credits under Finance C456. *NOTE A/See §200.2*

FINA C460 ***Financial Intermediaries (National)*** (3 credits)
Prerequisite: FINA C315. Principles of money and credit in their application to the operations of the central bank, chartered banks, and the financial system and markets generally. *NOTE A/See §200.2*

FINA C461 ***Financial Intermediaries (Quebec)*** (3 credits)
Prerequisite: FINA C315. A study of the operation of financial institutions in the Province of Quebec. *NOTE A/See §200.2*

FINA C467 *(Also listed under International Business)* ***International Managerial Finance and Investment*** (3 credits)
Prerequisite: MARK C462; FINA C315. (Students who have taken International Business C467 may not take this course for credit.) International transactions and financial flows. Business, political and foreign exchange risks. Insurance for foreign operations. Exchange rate protection. Public policy and institutions influencing international business. Various methods of financing used in world trade. Evaluation of foreign investment projects. Working capital management in the international context. Financial control of international operations.

FINA C491 ***Real Estate Investment and Finance*** (3 credits)
Prerequisite: FINA C315. This course examines the nature of investments in real property and of real estate financing. The topics covered include factors which affect valuation, risk, and income of real estate investments and methods of financing real estate transactions; the structure of the mortgage market, the role of financial institutions, and the influence of the government on the real estate market.

61.70 International Business

Programme Director
K.C. DHAWAN

24 Major in International Business
12 MARK C462, MARK C465, MANA C466, FINA C467
12 Additional credits from ACCO C468, MARK C467, MARK C468, MARK C492, MARK C495, MANA C493, ECON C375, ECON C377, ECON C442, ECON C443, POLI C315, POLI C321, POLI C323, RELI C380

12 Minor in International Business
3 MARK C462
9 Additional credits among MARK C465, MANA C466, FINA C467, ACCO C468

MARK C462 ***INTERNATIONAL BUSINESS Environment of World Business*** (3 credits)
Prerequisite: ACCO C218; QUAN C244; FINA C314; MANA C266; MARK C350. (Students who have taken International Business C362 may not take this course for credit.)
This is a foundation course in international business; the objective is to present information which will expose the student to cultural, social, political, economic, legal, and financial environments in which the Canadian businessman manages his operations abroad. Each student will be encouraged to develop his own philosophy toward international business activities by developing research and analytical skills in analyzing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada, etc.

MARK C465 ***INTERNATIONAL BUSINESS International Marketing Management*** (3 credits)
Prerequisite: MARK C462; MARK C350. (Students who have taken International Business C465 may not take this course for credit.)
This course studies the management approach to international marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational marketing strategies and programmes.

MARK C467 ***INTERNATIONAL BUSINESS Marketing in Selected Parts of the World*** (3 credits)
Prerequisite: MARK C462. This is an area study course in which selected parts of the world are covered in depth. The course will demonstrate the use of sources and methodologies not typical in Canadian business research. Countries/region to be covered may include Japan, Pacific Region, the Middle East, India, China, Russia, East European Countries, Western Europe, Africa and Latin America.

MARK C468 ***INTERNATIONAL BUSINESS Export/Import Procedures and Organization*** (3 credits)
Prerequisite: MARK C462. This course deals with the administration of foreign trade from a Canadian perspective with emphasis on applied techniques. Topics to be covered include world trade patterns, trade theories, export financing, custom tariffs and operation, international transportation and government export promotion services.

MARK C492 ***INTERNATIONAL BUSINESS Cross-Cultural Communications and Management*** (3 credits)
Prerequisite: MARK C462. This course deals with the multicultural dimensions of international business operations. The objective is to develop Canadian managerial skills for effective performance in an international setting. Topics to be covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy.

MANA C466 *INTERNATIONAL BUSINESS Management of Multinational Corporations* (3 credits)

Prerequisite: MARK C462; MANA C340. (Students who have taken International Business C466 may not take this course for credit.)

This is a course that demonstrates the analytical tools of operations and organization theory applicable within a multinational company. The course is designed to give students a grasp of the problems of strategy formulation and organization, and inculcates a general knowledge of the major parameters in which an international manager operates. Focus is on the Canadian, as well as other international companies based in U.S.A., Europe, Japan, etc.

MANA C493 *INTERNATIONAL BUSINESS International Business Law (3 credits)*

Prerequisite: MARK C462 and MANA C475. This course is an introduction to international business law. The focus will be Canadian but comparative material will be included and problems relating to other legal systems will be examined. Topics to be covered include private loans applicable to international business transactions, international sales, federal regulations, export controls and anti-dumping, export insurances, and bilateral trade agreements.

FINA C467 *INTERNATIONAL BUSINESS International Managerial Finance and Investment* (3 credits)

Prerequisite: MARK C462; FINA C315. (Students who have taken International Business C467 may not take this course for credit.)

International transactions and financial flows. Business, political, and foreign exchange risks. Insurance for foreign operations. Exchange-rate protection. Public policy and institutions influencing international business. Various methods of financing used in world trade. Evaluation of foreign investment projects. Working capital management in the international context. Financial control of international operations.

ACCO C468 *INTERNATIONAL BUSINESS International Accounting* (3 credits)

Prerequisite: MARK C462; ACCO C218; FINA C315. (Students who have taken International Business C468 may not take this course for credit.)

This course examines accounting practices employed by different countries; accounting and financial control of international operations, and various consolidation procedures and their effect on the interpretation of financial statements are discussed.

61.80 Management

Associate Professor and Chairman of the Department
J. GOODWIN

Professors
S.H. APPELBAUM
G. JOHNS
J. KELLY

Associate Professors
V. BABA
R. CRAWFORD
M. FRANKLIN
H. GRAM
A.B. IBRAHIM
M. JAMAL
P. PITSILADIS
G.S. RAJAN
J. SMOLA
W. TAYLOR

Assistant Professors
K. ARGHEYD
J.P. BRUNET
M. CARNEY
I. DEVINE
L. DYER
L. FALKENBERG
R. OPPENHEIMER
B. PRINCE
J. SEN

Lecturer
R. DAINOW

Sessional Lecturers
S. GUPTA
R. LEROUX
S. LEVINSON
J. OSS
T. PETRUSHKA
C. RAHN
F. RASHKOVAN
B. SHAPIRO
M. SHARP

Special Lecturer
H. TUTSCH

Executives-in-Residence
D. BENEDICT
W. PORTERFIELD

Adjunct Professor
R. LANDE

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24 Major in Administrative Management
3 MANA C345
3 MANA C369
3 MANA C341
3 MANA C461
3 MANA C462
3 MANA C464
3 MANA C476
3 one of MANA C402, C420, C442, C474

12 Minor in Administrative Management
3 MANA C369
3 MANA C442
3 MANA C461
3 MANA from the programme of Major in Administrative Management

12 Minor in Entrepreneurship and Small Business Management
3 MANA C451
3 MANA C452
3 MANA C454
3 MARK C352 or C485

24 Major in Human Resource Management
3 MANA C341
3 MANA C342
3 MANA C420
3 MANA C462
3 MANA C463
3 MANA C464
6 two of MANA C369, C441, C479

12 Minor in Personnel Management
3 MANA C341
3 MANA C462
3 MANA C464
3 MANA from programme of Major in Human Resource Management

12 Minor in Managerial Law
3 MANA C476
3 MANA C477
3 MANA C478
3 MANA C479

24 Major in Industrial Relations
3 MANA C462
3 MANA C464
3 MANA C465
3 MANA C479
3 ECON C381 or C481
3 MANA C468
3 one of MANA C469, C470, C471, C472
3 one of HIST C316; SOCI C280, C343, C346, C347

NOTE: In order to make it possible to take the programme in twenty-four (24) credits, one or more Sociology courses will be sub-divided next year.

MANA C211 ***Business Law*** (6 credits)
A general survey of the law obtaining in the Province of Quebec, with special emphasis on the aspects thereof relating to business and commerce. It includes a basic outline of the law of Domicile, Marriage, Persons, Property, Ownership and its modifications, Successions, Gifts and Wills, Testamentary Executors, Contracts, Quasi-Contracts, Offences and Quasi-Offences, Privileges, Hypothecs and Prescription, and a more detailed study of the Contract of Sale, Lease and Hire of Things and of Work, Mandate, Loan, Deposit, Partnership, Suretyship, Pledge, Insurance, and an outline of the basic law applying to Negotiable Instruments. Corporations, Carriers, Bankruptcy and Winding Up, and Copywrights, Patents, and Trade Marks. *NOTE A/See §200.2*
NOTE: Commerce and Administration students may not take this course for credits.
NOTE: Students who have received credit for POLI C350 may not take this course for credit.

MANA C213 ***Foundations of Behaviour**** (3 credits)
The purpose of this course is to introduce the student to those behavioural concepts relevant to the study of organizational problems. Topics include preception, attitudes, personality, group behaviour, roles, and culture as they relate to organizational processes.
NOTE: Students who have credit for PSYCH C200 or equivalent may not take MANA C213 for credit.
**This course will eventually be phased out of the course offerings and may not be taken for credit by students admitted to the University on or after June 1, 1986.*

MANA C266 ***Foundations of Modern Management*** (3 credits)
This course introduces students to the basic elements of the managerial process (e.g., planning, organizing, controlling, motivating, etc.) and presents the historical base upon which contemporary management theory and practice is built. The evolution and scope of management will be considered, with illustrations from both large and small Canadian enterprises.

MANA C340 ***Organizational Behaviour*** (3 credits)
Prerequisite: MANA C266. This course is designed to provide the student with an opportunity to study individual behaviour in formal organizations. Through theoretical, case and experiential approaches, the focus of instruction progressively moves through individual and group levels of analysis. Topics covered in this course include perception, learning, personality, motivation, leadership and group behaviour. The objective of the course is to improve the student's perceptual, analytical and problem-solving skills in the diagnosis and innovative resolution of behavioural problems which are requisite for organizational performance.

MANA C341 ***Organization Theory*** (3 credits)
Prerequisite: MANA C340. The function, structure, and processes of organizations will provide the focus for study. Inter-relationships among the psychosocial, technological, and formal properties of organizations will be examined. Emphasis will be placed on the diagnosis, analysis of organizational problems, and optimal-design alternatives for improving organizational performance and effectiveness will be explored. The objective is to provide the student with a thorough understanding of the nature of contemporary complex organizations.

MANA C342 ***Organizational Change*** (3 credits)
Prerequisite: MANA C340. An administrative perspective of the behavioural and rational empirical strategies for effecting change in organizations. Emphasis will be placed on an eclectic approach to the planning and implementation of change. Models and methods of change will be reviewed, and opportunities for the development of change-agent skills will be provided.

MANA C345 ***Production Management I*** (3 credits)
Prerequisite: QUAN C314 or QUAN C315*. It is the production function of the enterprise that gives us the products or services that we sell. In this course, we attempt to help management guide and control this area. Topics include government programmes and incentives, health and safety regulations, production-incentive systems, management-information systems, and plant location.
**For students admitted to the University effective June 1, 1986*

MANA C346 ***Production Management II*** (3 credits)
Prerequisite: MANA C345. This course is a continuation of Production Management I and is designed to supplement the knowledge of those students choosing to Minor in Production Management. One or more of the following topics will be dealt with in depth: work measurement and development of standard data for incentive systems; production planning, scheduling, and control; research and development; plant layout and materials handling.

MANA C368 ***Social Aspects of Enterprise*** (3 credits)
Prerequisite: MANA C266. The purpose of this course is to facilitate understanding of the impact of social, economic, political, and ethical environments on the process of managerial decision-making. Consideration is given to the conceptual foundations of business, including the business corporation, its function, and the legitimacy of its power structure. *NOTE A/See §200.2*

MANA C369 ***Canadian Business and its Environment*** (3 credits)
Prerequisite: QUAN C244; ECON C203; MANA C266; MARK C213; FINA C314. The purpose of this course is to examine the functioning of Canadian business and its relationships with its public, including stockholders, consumers, employees, labour, community, and government. Major contem-

porary issues, such as the impact of technology on people and the physical environment, are examined. *NOTE A/See §200.2*

MANA C402 ***Supervisory Practice*** (3 credits)
Prerequisite: MANA C340. A seminar focusing on the emerging understanding of leadership and supervisory techniques in task-oriented organizations. Contemporary concepts and research on leadership and supervision will be examined. The seminar will analyze the multiple bases for influence and the situational or contingency aspects of leadership. A balance among the conceptual, diagnostic, and experiential approaches to the development of supervisory capability will be emphasized.

MANA C409 ***Principles of Insurance*** (3 credits)
This course examines the growth of insurance companies in Canada and their effect upon the economy. In addition, the basic fundamentals of insurance are covered, including such topics as life insurance, income replacement, annuities, group insurance, liability, auto, fire, and theft insurance. Practical applications and use of insurance dealing with both personal and business situations will be noted. *NOTE A/See §200.2*

MANA C420 ***Business Research Methods*** (3 credits)
Prerequisite: MANA C340, QUAN C244. This seminar focuses on the means by which social and organizational data can be gathered, analyzed, and interpreted. Needs of the firm for efficient, timely, and unobtrusive research are given special attention. Topic coverage includes applications of the scientific method, research design, field research techniques, data analysis, research utilization, and use of existing information sources. Student projects will parallel the classroom activities by designing and conducting business research studies of limited scale.

MANA C441 ***Conflict Management*** (3 credits)
Prerequisite: MANA C340. An administrative approach to the study of interpersonal, intergroup, and intra-organizational conflict. Utilizes lectures, case studies, and interaction exercises to convey theory, empirical research, and applications.

MANA C442 ***Managerial Concepts*** (3 credits)
Prerequisite: MANA C340. This course provides an opportunity for intense study of recent developmental topics within the discipline. Topics might include: Women in Management; Managing in Quebec; Management by Objectives; Long-range Planning; Equity Theories of Motivation; Changing Roles of Managers.

MANA C451 ***Managing a Small Business*** (3 credits)
Prerequisite: QUAN C244; ECON C203; MANA C266; MARK C213; FINA C314. This introductory course emphasizes the *operational* aspects of management that are uniquely important to a small enterprise. It provides opportunity to practise operational decision-making under conditions characteristic for small firms.

MANA C452 ***Entrepreneurship*** (3 credits)
Prerequisite: QUAN C244; ECON C203; MANA C266; MARK C213; FINA C314. This course will provide for the student a source of the basic techniques needed to start or purchase a business of his own. Consideration will be given to evaluation methods, the nature of an entrepreneur, legal and tax aspects and other aspects of interest to an individual starting a venture as a career alternative.

MANA C454 ***Policy and Strategy for the Small Enterprise*** (3 credits)
Prerequisite: FINA C315; MARK C350; QUAN C314 or QUAN C315*; MANA C340; MANA C475; MANA C451; MANA C452; and 39 additional credits in the Faculty of Commerce and Administration. This course will help the student to familiarize himself with problems of *strategy formulation* and *implementation* within the framework of starting and/or managing a small or medium-sized enterprise. All functions of management will be considered in this context and field work will be encouraged.
**For students admitted to the University effective June 1, 1986*

MANA C460 ***Business Policy I*** (3 credits)
Prerequisite: FINA C315; MARK C350; QUAN C314 or QUAN C315*; MANA C340; and 45 additional credits in the BComm or BAdmin programme. This course is designed to introduce the student to strategy formulation and implementation. Emphasis will be on integrating the learning of the programme in order to develop in students a global view of the organization. Cases will be drawn from the private, public, and non-profit sectors, and consideration will be given to policy problems in the small business and large corporation context, as well as the Canadian and international milieus.
**For students admitted to the University effective June 1, 1986*

MANA C461 ***Business Policy II*** (3 credits)
Prerequisite: MANA C460. This course will concentrate on how the strategy formulated in Business Policy I will be implemented by the organization. Organization structures will be studied in differing environments. The relationships between organization structures and the organization's strategy will be analyzed. The problems encountered by general managers as well as middle managers in the process of the implementation of the set policies will be studied. *NOTE A/See §200.2*

MANA C462 ***Personnel Management I*** (3 credits)
Prerequisite: MANA C340. The aim of this course is to provide a sound background in fundamentals,

theory, principles and practice of personnel management. It will focus on the philosophies underlying current personnel policy and practices. *NOTE A/See §200.2*

MANA C463 ***Personnel Management II*** (3 credits)
Prerequisite: MANA C462. The course will focus on the techniques of: recruitment, selection, training, executive development, labour relations, performance appraisal, and compensation administration.

MANA C464 ***Labour and Industrial Relations I*** (3 credits)
Prerequisite: MANA C340. Labour relations is a survey course designed to provide a practical and comprehensive approach to the state of labour-management relations in Canada. *NOTE A/See §200.2*

MANA C465 ***Collective Bargaining and Industrial Relations II*** (3 credits)
Prerequisite: MANA C464. This course is designed to help the student to look at day-to-day problems connected with negotiation and administration of collective bargaining agreements. The course puts some stress on the behavioural aspects of industrial relations. *NOTE A/See §200.2*

MANA C466 *(Also listed under International Business)* ***Management of Multinational Corporations***
(3 credits)
Prerequisite: MARK C462, MANA C340. (Students who have taken International Business C466 may not take this course for credit.)
This is a course that demonstrates the analytical tools of operations and organization theory applicable within a multinational company. The course is designed to give students a grasp of the problems of strategy formulation and organization, and inculcates a general knowledge of the major parameters in which an international manager operates. Focus is on the Canadian as well as other international companies based in U.S.A., Europe, Japan, etc.

MANA C467 ***Management Theory - Advanced*** (3 credits)
Prerequisite: MANA C266. This course will attempt to develop further the conceptual framework which was established in Management Theory I. To this end, it will examine selected management concepts and appraise their value in terms of their application to the actual practice of business. Issues such as the effect of innovation and technological change, managing the knowledge worker, organization planning, and comparative management will be considered. *NOTE A/See §200.2*

MANA C468 ***North American Labour Movements*** (3 credits)
Prerequisite: MANA C464. This course focuses on the evolution of the labour movements in the U.S., Canada and Quebec since 1945. The structure and philosophy of American, Canadian and Quebec unions since that date will also be analyzed. The similarities and dissimilarities of the labour movements in the U.S., Canada and Quebec, their impact on society, and the emerging role of the state in union affairs will also be covered.

MANA C469 ***Industrial Relations in the Public Sector*** (3 credits)
Prerequisite: MANA C464. Historically, the government plays a third party role in collective bargaining. But as the state emerges as the largest employer in advanced industrial society, its combined roles as employer and mediator demand clarification and modernization. This course analyzes the development of the state as an employer, the growth of public sector unionism, and the impact of public sector collective bargaining on the private sector. Emphasis will be on the Quebec and Canadian experiences, with comparisons made to public sector industrial relations in other countries as well.

MANA C470 ***Comparative Industrial Relations Systems*** (3 credits)
Prerequisite: MANA C464. This course begins by presenting and contrasting the major theories of labour-management-state competition for control of the work situation. It then moves to applying those theories to national industrial relations systems in advanced industrial capitalist societies, in developed state socialist societies, and in under-developed societies.

MANA C471 ***Issues in Quebec Industrial Relations*** (3 credits)
Prerequisite: MANA C464. In this course, the focus is on industrial relations in specific industrial sectors in Quebec, stressing the impact of interests and forces outside the sector which influence the nature of industrial relations within it. The specific sectors will be chosen each term by the instructor and the students in order to respond to special interests of the students.

MANA C472 ***Grievance, Arbitration and Collective Agreements*** (3 credits)
Prerequisite: MANA C464. What is the nature and limits of a collective agreement? What can be covered and what not? This courses discusses these questions and then goes on to analyze the grievance process and the various forms of grievance arbitration from technical and social perspectives.

MANA C474 ***Institutional Administration*** (3 credits)
Prerequisite: MANA C340. Management of institutions and agencies in the non-profit (private and public) sector presents unique opportunities and challenges to the manager. This class will provide an introduction to that field. Emphasis will be given to those characteristics of the organization and functioning of these programmes which distinguish them from commercial firms, including the

peculiar nature of human services, and the influence of social-political processes. Class activities will utilize theoretical and case material and field observations. Student projects will concentrate on policy formulation and administrative function in an agency of the student's choice.

MANA C475 ***Business Law I*** (3 credits)
Prerequisite: QUAN C243; ECON C203; MANA C266; MARK C213; FINA C314. This course deals with the Canadian and Quebec Law governing business organizations, and the Quebec Civil Law concerning persons, property, and ownership obligations, civil responsibility, contracts in general and mandate.

MANA C476 ***Business Law II*** (3 credits)
Prerequisite: MANA C475. Federal and provincial government regulation of business, including bankruptcy, anti-combines, trade marks and patents, labour law, insurance, special commercial contracts including secured transactions, fair employment, environmental law.

MANA C477 ***The Law of Insolvency and Secured Transactions*** (3 credits)
Prerequisite: MANA C475. An examination of the various laws and cases, both Federal and Provincial, across Canada, governing commercial insolvency, with particular emphasis upon the liability of directors and officers, and the creditor's rights in bankruptcy, including the role of inspectors and the trustee. An examination of the various forms of secured transactions, of which creditors may avail themselves, more particularly financial institutions, including assignment of book debts, pledge, mortgages, bonds, trust deeds.

MANA C478 ***Company Law*** (3 credits)
Prerequisite: MANA C475. The examination of important legal issues relating to the business corporation, including an analysis of their legal nature and structure, and the powers, rights, and obligations of directors, officers, and shareholders, including analysis of the legal implications, insider trading, company re-organization, mergers, joint ventures, and takeovers. These matters will be studied through the Federal, Quebec, and Ontario Companies' Acts and relevant court cases.

MANA C479 ***Labour Law*** (3 credits)
Prerequisite: MANA C475. A study of the law and relevant court cases dealing with major labour-management issues, including collective bargaining, union certification, strikes, lock-outs, grievances, and arbitration. Covers Canadian law, primarily that of Quebec.

MANA C493 *(Also listed under International Business)* ***International Business Law (3 credits)***
Prerequisite: MARK C462 and MANA C475. This course is an introduction to international business law. The focus will be Canadian but comparative material will be included and problems relating to other legal systems will be examined. Topics to be covered include private loans applicable to international business transactions, international sales, federal regulations, export controls and anti-dumping, export insurances, and bilateral trade agreements.

MANA C499 ***Special Topics in Administration*** (3 credits)
Prerequisite: Written permission of the Department. Intended to complement and supplement business courses taken previously or concurrently, this course emphasizes business literature and modern thought. Students are encouraged to work independently on research topics of interest to them. Students repeating MANA C499 register for credits under MANA C498. *NOTE A/See §200.2*

61.90 Marketing

Professor and Chairman of Department
M. LAROCHE

Professors
V.H. KIRPALANI
R. MCTAVISH

Associate Professors
M.J. BERGIER
U. de BRENTANI
K.C. DHAWAN
Z. GIDENGIL
K.L. MCGOWN
P. PASOLD
C.A. ROSS

Assistant Professors
B. BARBIERI
B.K. BUYYUKURT
B. FARIVAR
C. KIM
J. ROSENBLATT

Lecturers
F.R. LINDSAY
R. McKEOWN
H. SIMPKINS

Executive-in-Residence
R.J. REDDING

24 Major in Marketing
3 MARK C352
3 MARK C402
3 MARK C490
15 MARK credits offered by the Department.

12 Minor in Marketing
3 MARK C352
3 MARK C402
3 MARK C490
3 MARK credits offered by the Department.

CERTIFICATE IN MARKETING RESEARCH

NOTE: This programme is not open to students registered in a programme leading to the degrees of Bachelor of Commerce or Bachelor of Administration.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so tranferred are determined by the University at the point of entry into the programme.

Admission Requirements

a) Diploma of Collegial Studies or the equivalent; MATH C208 and C209 or equivalent

or

b) Mature Students: MATH C206, C208, C209 or the equivalent, and a minimum of two years business experience in a supervisory capacity.

30 Certificate in Marketing Research
3 MARK C213
3 MARK C350
3 MARK C352
3 MARK C402
3 MARK C452
3 QUAN C222
3 QUAN C243
3 QUAN C244
3 QUAN C447
3 QUAN C448

MINOR IN MARKETING RESEARCH

NOTE: This programme is not open to students registered in a programme leading to the degrees of Bachelor of Commerce or Bachelor of Administration.

30 Minor in Marketing Research
3 MARK C213
3 MARK C350
3 MARK C352
3 MARK C402
3 MARK C452
3 QUAN C222
3 QUAN C243
3 QUAN C244
3 QUAN C447
3 QUAN C448

MARK C213 ***The Marketing Process (Introductory)*** (3 credits)
Purpose/Objectives: The course examines the nature of Marketing, its role in society and the inter-relationships that are operative within the Marketing process—both externally, as related to society and the consumer, and internally as related to the organization of the Marketing process within the firm. Many of the factors influencing these relationships are examined. *NOTE A/See §200.2*

MARK C350 ***Marketing Management*** (3 credits)
Prerequisite: MARK C213. Purpose/Objectives: The course is an introduction to the managerial concepts and practices of Marketing. The four basic elements of the marketing mix—the product, the price, promotion and distribution—and their interrelationships are examined. Use of the case method

help students apply these concepts to realistic marketing problems in a host of business settings, including the small business and the international environment. The course builds on the concepts presented in MARK C213 and develops in the student a critical appreciation of how the concepts and theories relate to the basic tools of marketing; the ability to manipulate these tools in an integrated fashion in a variety of business settings.

MARK C351 ***Transportation and Marketing Logistics*** (3 credits)
This course will deal with economic principles underlying the various modes of transport: i.e., rail, water, motor, air, and pipeline. Current problems of each will be discussed. In addition a survey of the principles of business logistics will be covered. Cases will be utilized when possible. *NOTE A/See §200.2*
NOTE: Students with credits for Administration C350 may not take this course for credit.

MARK C352 ***Buyer Behaviour*** (3 credits)
Prerequisite: MARK C213 and QUAN C243. This course analyzes the motivations, roles, and behaviour of the consumers, how they are affected by economic, social, and cultural influences, and how the marketer may model this behaviour for decision-making purposes. *NOTE A/See §200.2*

MARK C402 ***Marketing Research I (Methods)*** (3 credits)
Prerequisite: MARK C350 and QUAN C244. The role of research in the marketing process, the role of models, and the development of measurement techniques are discussed. Emphasis is placed on the nature and scope of marketing research methods for obtaining internal and external data, and on the steps and principles involved in gathering and analyzing data. The student is also briefly introduced to applications of marketing research. *NOTE A/See §200.2*

MARK C452 ***Marketing Research II (Application)*** (3 credits)
Prerequisite: MARK C402. The application of marketing research to problem areas such as advertising, sales management and product strategy. Alternative research designs are applied to actual problems. *NOTE A/See §200.2*

MARK C453 ***Advertising and Sales Promotion Management*** (3 credits)
Prerequisite: MARK C350. The objectives of this course are to provide the student with an introduction to an understanding of the principles of advertising and sales promotion from three different viewpoints: the nature of services provided by advertising agencies, the needs of the users (i.e. business, institutions) of these services, the needs of society in economic, ethical and legal terms. *NOTE A/See §200.2*

MARK C454 ***Sales Management*** (3 credits)
Prerequisite: MARK C350. The course deals with the theoretical and applied aspects of management of personal selling. Through cases, simulations and special presentations the student learns how to recruit, select, train, organize, motivate, evaluate, compensate, supervise, and control the sales forces. *NOTE A/See §200.2*

MARK C462 *(Also listed under International Business)* ***Environment of World Business*** (3 credits)
Prerequisite: ACCO C218, QUAN C244, FINA C314, MANA C266, MARK C350. (Students who have taken International Business C362 may not take this course for credit.)
This is a foundation course in international business; the objective is to present information which will expose the student to cultural, social, political, economic, legal, and financial environments in which the Canadian businessman manages his operations abroad. Each student will be encouraged to develop his own philosophy toward international business activities by developing research and analytical skills in analyzing current and long-term problems perceived in different economic systems and environments. Specific topics include empirical dimensions of world economy, economic development, international trade and investment patterns, regional economic co-operation, area studies, Canadian nationalism, and foreign investment in Canada, etc.

MARK C463 ***Retail Management*** (3 credits)
Prerequisite: MARK C350. This course seeks to apply the theories of marketing and administration to the retail situation. Topics to be covered include site selection for single and multi-unit retail outlets, organizing and staffing the retail operation, the wholesaler-retailer relationship, consumer behaviour in the retail situation. The impact of such new developments as consumer cooperatives, franchising, discounting, and computer technology on the future of retailing will also be considered. *NOTE A/See §200.2*

MARK C464 ***Consumerism*** (3 credits)
Prerequisite: MARK C350. The current evolution of marketing and consumerism is subjected to critical evaluation and analytical review. Problem areas which may be examined include: marketing costs and efficiency, the social objectives of and objections to marketing, the impact of marketing on the environment, the 'pollution of advertising', ethics of marketers, and the role of governments in the market place. *NOTE A/See §200.2*

MARK C465 *(Also listed under International Business)* ***International Marketing Management*** (3 credits)
Prerequisite: MARK C462; MARK C350. (Students who have taken International Business C465 may not take this course for credit). This course studies the management approach to international

marketing, with emphasis on key variables that are controllable by the international marketing manager. Attention is focused on market measurement, product policy, channels, pricing, and promotion, with special emphasis on the development and control of multinational marketing strategies and programmes.

MARK C467 *(Also listed under International Business)* ***Marketing in Selected Parts of the World*** (3 credits)
Prerequisite: MARK C462. This is an area study course in which selected parts of the world are covered in depth. The course will demonstrate the use of sources and methodologies not typical in Canadian business research. Countries/region to be covered may include Japan, Pacific Region, the Middle East, India, China, Russia, East European Countries, Western Europe, Africa, and Latin America.

MARK C468 *(Also listed under International Business)* ***Export/Import Procedures and Organization*** (3 credits)
Prerequisite: MARK C462. This course deals with the administration of foreign trade from a Canadian perspective with emphasis on applied techniques. Topics to be covered include world trade patterns, trade theories, export financing, custom tariffs and operation, international transportation and government export promotion services.

MARK C473 ***Advertising Strategy and Planning*** (3 credits)
Prerequisite: MARK C352; MARK C402; MARK C453. This course deals with advanced topics in the strategic application of advertising to marketing problems and opportunities. Its major focus is the development of the advertising plan. Through case studies, assignments and group projects, the student develops a deeper understanding of the various steps involved in developing an advertising campaign in Canada, particularly strategy planning, development of objectives, creative and media planning as well as all forms of advertising research.

MARK C485 ***Industrial Marketing*** (3 credits)
Prerequisite: MARK C350. The course will focus on the managerial aspects of industrial marketing. The concept of organization buying behaviour and its impact on marketing strategy formulation will be discussed. Management of the industrial marketing mix considering product service development, intelligence, promotion, channels, and performance measurement will be covered, both in existing product lines and new product-launch activities.

MARK C486 ***Product Management*** (3 credits)
Prerequisite: MARK C350. In addition to analyzing product cycles and their characteristics and strategies which relate to each stage, this course delves into some of the more practical aspects of product policy-setting strategy formulation of the analysis, development, and execution of marketing programmes for new and existing products. This course should make the student familiar with one or more product management operations through case discussions and/or field studies.

MARK C490 ***Marketing Policy*** (3 credits)
Prerequisite: MARK C213; MARK C350 and 9 additional credits in Marketing courses. A capstone course in Marketing, utilizing readings, projects, and selected case studies requiring the student to incorporate concepts and techniques of previous marketing courses in determining marketing policy. *NOTE A/See §200.2*

MARK C491 ***Special Topics Seminar*** (3 credits)
Prerequisite: Written permission of the Department. This seminar is an inquiry into various selected topics which will vary from year to year. Students repeating MARK C491 register for credits under MARK C492. *NOTE A/See §200.2*

MARK C492 *(Also listed under International Business)* ***Cross-Cultural Communications and Management*** (3 credits)
Prerequisite: MARK C462. This course deals with the multicultural dimensions of international business operations. The objective is to develop Canadian managerial skills for effective performance in an international setting. Topics to be covered include international negotiations, management of multicultural personnel, cross-cultural consumer behaviour profile, cross-cultural communication, and other cultural aspects of marketing strategy.

61.100 Quantitative Methods

Associate Professor and Chairman of the Department
M. KUSY

Professors
S. GOYAL
G. PEDERZOLI
C. SANDBLOM

Associate Professors
M. ANVARI
C. BAYNE
D. DOREEN
T. OPP
P. WADE
R. WILLS

Assistant Professors
B. BARAN
M. BUYUKKURT
A. CRISALLI
H. EISELT
A. FARHOOMAND
T. POLITOF
G. RAJAMANNAR
A. SATIR
D. SCOTT
T. TOMBERLIN

Lecturer
M. SHARMA

Sessional Lecturers
S. AHMED
P. BALTHAZARD
G. BOON
E. EL-KHALIL
G. KORDA
K. LEONARD
K. MACKENZIE
R. SONI

A student in any Major or Minor Programme in Quantitative Methods is required to take QUAN C222 in addition to the courses which are listed for the Programme.

24 Major in Quantitative Methods
12 QUAN C316, C323, C326, C345
12 QUAN C412, C414, C415, C416, C423, C424, C425, C426, C444, C447, C448

24 Major in Management Information Systems
6 COMP 251, QUAN C327
12 QUAN C422, C423, C424, C425
6 QUAN C323, C417, C421, C426, C427

12 Minor in Business Statistics
3 QUAN C345
3 QUAN C444
3 QUAN C447
3 QUAN C448

12 Minor in Management Information Systems
9 QUAN C327, C424, C425
3 QUAN C323, C417, C421, C423, C426, C427

12 Minor in Quantitative Methods
3 QUAN C316, C326, C345
3 QUAN C412, C414, C415, C416
3 QUAN C444, C447, C448
3 QUAN C423, C426

12 Minor in Managerial Operations Research
12 QUAN C316, C412, C414, C415, C416

12 Minor in Production Systems
3 QUAN C365
3 MANA C345
3 QUAN C416
3 QUAN C412, C448

CERTIFICATE IN OPERATIONS RESEARCH

NOTE: This programme is not open to students registered in a programme leading to the degrees of Bachelor of Commerce or Bachelor of Administration.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Admission Requirements

a) Diploma of Collegial Studies or the equivalent; MATH C208, C209, C211 or the equivalent: QUAN C222, or COMP C211 or equivalent.

or

b) Mature Students; MATH C208, C209, C211 or the equivalent: COMP C211 or QUAN

C222 or equivalent, and a minimum of two years business experience in a supervisory capacity.

30 Certificate in Operations Research
12 QUAN C243, C244, C315, C327
18 QUAN C316, C345, C412, C414, C416, C426, C433, MANA C345

MINOR IN OPERATIONS RESEARCH

NOTE: This programme is not open to students registered in a programme leading to the degrees of Bachelor of Commerce or Bachelor of Administration.

Admission Requirements

MATH C208, C209, C211 or equivalent courses: COMP C211 or QUAN C222 or equivalent.

30 Minor in Operations Research
15 QUAN C243, C244, C313, C314, C327
15 QUAN C316, C345, C412, C414, C416, C426, C433, MANA C345

QUAN C222 ***Introduction to Management Information Systems*** (3 credits)
Prerequisite: ACCO C213, QUAN C243, MANA C266, MARK C213. The objective of this course is to introduce students to computers and their applications in business. Specifically, the course will attempt to expose students to the principles of management information systems. Topics include structure of computers and their peripherals, file organization and processing methods, an introduction to business systems analysis and business system design, the impact of computers on management, the role of MIS in organizations, concepts of computer programming for solving business problems, introduction to BASIC programming, and a brief review of commercially available software packages such SPSS and STATPK.

QUAN C243 ***Introduction to Business Statistics and Decision Models*** (3 credits)
Prerequisite: MATH C208; MATH C209 previously or concurrently. (Students admitted from CEGEP with the 10.12 profile are eligible for direct entry into QUAN C243.) The primary purpose of this course is to give the student a rigorous knowledge of probabilistic models for decision making used by business analysts in the functional areas of production, management, marketing, manufacturing, consumer research and the analysis of social and economic decision problems. The secondary objective is to give students a foundation for the type of analytical reasoning which will be required in their business profession. Topics covered include: descriptive statistics, probability theory, decision analysis, probability distributions, sampling theory, estimation and hypothesis testing. *NOTE See §200.7*

QUAN C244 ***Introduction to Data Analysis for Business*** (3 credits)
Prerequisite: QUAN C243. The primary purpose of this course is to give the student a rigorous knowledge of statistical methods for data analysis which will be required in their business profession. The secondary objective is to give students a foundation in model building techniques used by business analysts in the functional areas of production, management, marketing and finance. Topics covered include: non-parametric statistics, analysis of variance, regression and correlation analysis, forecasting, time-series analysis and indices. Emphasis will be placed on computer applications. *NOTE See §200.7*

QUAN C313* ***Managerial Operations Research*** (3 credits)
Prerequisite: QUAN C244; MATH C211. (Students admitted from CEGEP with the 10.12 profile are exempt from MATH C211.) This course is an introduction to operations research and its applications to the functional areas of administration. The basic model is Linear Programming. We discuss formulations, graphical and algebraic solutions, sensitivity analyses and the use of a computer package for solving large-scale problems. The related transportation, assignment, and integer programming problems are also discussed.
**This course will eventually be phased out of the course offerings and may not be taken for credit by students admitted to the University on or after June 1, 1986.*

QUAN C314* ***Operations Research and Production Systems*** (3 credits)
Prerequisite: QUAN C313. This course surveys several operations research and production models and their applications. The basic areas covered are: Project Management, Decision Theory, Inventory and Production Models, Simulation, Waiting-line models, Dynamic Programming, and Markov processes. The tools of probability analysis will be used.
**This course will eventually be phased out of the course offerings and may not be taken for credit by students admitted to the University on or after June 1, 1986.*

QUAN C315 ***Introduction to Production/Operations Management*** (3 credits)
Prerequisite: QUAN C244; MATH C211. (Students admitted from CEGEP with the 10.12 profile are exempt from MATH C211.) The objective of this course is to introduce the students to analytical decision making in an operations management context. The functional aspect of operations and the relationship of operations to the other business functions will be emphasized throughout. The course will be a combination of techniques and applications. Linear programming, the transportation problem and project management will be the techniques emphasized to aid in making process and capacity decisions for both the manufacturing and service industries.

QUAN C316 ***Optimization Techniques*** (3 credits)
Prerequisite: QUAN C313. This course deals with optimization techniques in Management Sciences. It includes: linear programming, simplex algorithm, sensitivity testing and duality, postoptimality analysis, separable programming, dynamic programming, integer programming, stochastic programming. Management applications, such as portfolio selection, capital budgeting, production smoothing, inventory scheduling, competitive strategies, regeneration models will be given particular attention.

QUAN C323 ***Use of Computers in Business Decision Making*** (3 credits)
Prerequisite: QUAN C222. The objective of this course is to introduce the student to the use of computers for analyzing analytical business problems. This will be achieved by considering a variety of problems that arise in the functional areas, e.g. forecasting, budgeting, market activity analysis, and examining how the computer can be profitably used to facilitate the decision-making process. Commercially available packages, e.g., spread-sheet analysis, statistical and optimization programmes will be described.

QUAN C326 ***Principles of Management Information Systems (3 credits)***
Prerequisite: QUAN C222. This course offers a survey of various concepts of M.I.S. with emphasis on computer-related aspects. Topics will include the role and influence of M.I.S. in an organization, methods of file organization, data base management, processing techniques, software methodologies, information systems analysis and design, decision support systems, and information processing management. (This course may not be taken for credit by Information Systems major or minor students).

QUAN C327 ***Business Systems and Information Systems*** (3 credits)
Prerequisite: QUAN C222. Students who have credits for QUAN C326 may not take this course for credit. This course introduces students to business systems, and especially their informational aspects, in such a way that both conceptual and concrete approaches are integrated. Thus, a case study approach will be used in conjunction with explaining diagramming methods and concepts. The basic modelling framework will be the business organization considered as a system. Major topics include: the system development process, and structured analysis and design; system modelling and general systems concepts; diagramming methods, including both flow and structure charts.

QUAN C345 ***Business Decision Analysis*** (3 credits)
Prerequisite: QUAN C244. This course deals with the analysis of choices under uncertainty. It provides a coverage of Bayesian inference, decision theory, prior, posterior, and pre-posterior distributions (discrete and continuous). It includes the analysis of uncertain payoffs and biased measurements, analytical utility functions and their properties; the use of judgment probability and the principle of substitution for strategies. Economics of sampling, risk sharing, group decision will also be considered. Examples of decision making in production planning, research and development, manpower planning, finance, etc., will be presented and discussed.

QUAN C353 ***Mathematical Analysis for Business— Calculus*** (3 credits)
Prerequisite: MATH C208; MATH C209. The various applications of differential and integral calculus and the use of difference and differential equations in the functional areas of management; e.g. production, marketing, accounting, finance, personnel administration, and purchasing will be studied. *NOTE A/See §200.2*

QUAN C354 ***Mathematical Analysis for Business—Matrix Algebra*** (3 credits)
Prerequisite: MATH C208; MATH C209. Properties and applications of matrix algebra in the functional areas of management; e.g., production, marketing, accounting and finance, personnel administration, and purchasing will be studied. Special applications (e.g. Input-Output Analysis) will be explored. *NOTE A/See §200.2*

QUAN C365 ***Production Systems I*** (3 credits)
Prerequisite: QUAN C313 or QUAN C315*. In this course, an introduction to production systems of the enterprise is presented. Topics include: technology and design, forecasting, allocation of resources, scheduling, work methods and measurement, location problems, plant layout and materials handling, process control and quality control.
**For students admitted to the University effective June 1, 1986*

QUAN C412 ***Network Models*** (3 credits)
Prerequisite: QUAN C313 or QUAN C315*. The course includes the fundamentals of graph theory; Euler graphs and "Chinese postman" problems; Hamiltonian graphs and "travelling salesman" tours; shortest-route problems; maximal and feasible static and dynamic flows and circulations in networks. Applications will be studied in the fields of scheduling, input-output models and optimal plant locations.
**For students admitted to the University effective June 1, 1986*

QUAN C414 ***Analytical Methods in Public Decision Making*** (3 credits)
Prerequisite: QUAN C313 or QUAN C315*. The course surveys applications of Operations Research in the public sector. Efficiency and effectiveness issues in police deployment, municipal resource allocation, health care and criminal justice models are discussed. Equity and cost-benefit analysis are considered. Experience in Canada and other countries will be studied, using the tools of calculus, statistics, operations research and economics.
**For students admitted to the University effective June 1, 1986*

QUAN C415 ***Non-Linear Programming*** (3 credits)
Prerequisite: QUAN C313 or QUAN C315*. This course will introduce some fundamental concepts in non-linear optimization. The topics covered will include: convexity, formulation of non-linear problems, identification of optimal points, unconstrained and constrained optimization techniques. Emphasis throughout the course will be placed on business-related problems.
**For students admitted to the University effective June 1, 1986*

QUAN C416 ***Inventory, Replacement, Maintenance Models*** (3 credits)
Prerequisite: QUAN C313 or C315*. This course covers deterministic inventory models, stochastic inventory models, special structures of inventory control practice; replacement of items which deteriorate with time; replacement of items which fail suddenly; staffing problems; maintenance models; reliability theory; analysis of operational warranty techniques; renewal theory and managerial applications.
**For students admitted to the University effective June 1, 1986*

QUAN C417 ***Commercial Software*** (3 credits)
Prerequisite: QUAN C222 and a course in a business computer programming language, e.g. C421, COMP 251, COMP C341 or equivalent. A study of a representative sample of the software programme packages available commercially for use in business applications, including systems packages, such as file management, payroll, inventory, and bill-of-materials; control packages, such as critical-path scheduling, linear programming, and simulation. Sources of software; criteria for evaluating and choosing packages; implementation, maintenance, and modification of packages. Class and individual projects on the use of typical packages.

QUAN C421 ***RPG II Programming*** (3 credits)
Prerequisite: QUAN C222 and a course in a business computer programming language, e.g. COMP 251, COMP C241, COMP C341 or equivalent. R.P.G. II is a flexible, problem-oriented, programme generatory-type language intended for use in business applications. Students will be introduced to R.P.G., and, working in an I.B.M. environment, they will be required to complete about five programming assignments dealing with typical data processing problems including: multiple level control break reports, table processing, sequential and indexed file updating. In addition, various elements of the R.P.G. III programming language will be presented.

QUAN C422 ***Information Function Management*** (3 credits)
Prerequisite: QUAN C327, QUAN C424 (previously or concurrently). The theory and practice of management as applied in commercial data processing. Planning for new business systems and computers; the feasibility study; the computer as an aid in planning; the organization of a data centre; staffing the data centre; job description and job specifications; maintenance and security; control methods for operation, data entry, processing and output.

QUAN C423 ***Application Software Development*** (3 credits)
Prerequisite: QUAN C222, COMP 251 or equivalent. This course is divided into 2 parts:
1) Conventional methodologies utilized in the development of business application software will be examined and practiced using the COBOL programming language. Topics of study include structured design, structured programming, and the management of software development.
2) Current trends will be examined, focussing on application development without conventional programming. Topics include fourth generation languages, query languages, natural languages, programme and application generators.

QUAN C424 ***Information System Analysis and Design I*** (3 credits)
Prerequisite: QUAN C326 or QUAN C327. This course discusses the techniques of system analysis and evaluation applied to management information systems. Topics will include: basic concepts of management information systems and the impact of computers on managerial functions; where to computerize information in business; interactive and batch-mode transaction processing; file types and access methods, and the database concept; maintaining quality, economy, security and integrity in an information system; programming facilities and methodologies; methods of evaluating existing systems or proposed modifications. *NOTE A/See §200.2*

QUAN C425 ***Information System Analysis and Design II*** (3 credits)
Prerequisite: QUAN C327, QUAN C424. This course discusses: techniques of business information system design; the different conventional applications of the computer such as production, inventory control, order entry, invoicing, accounting, and sales reporting; inter-relations among the various applications. Approximately half of the course grade will be based on the study of a particular application case, by students individually or in small groups. *NOTE A/See §200.2*

QUAN C426 ***Business System Simulation*** (3 credits)
Prerequisite: QUAN C326 or QUAN C327, and a course in a computer language, e.g. COMP C241, COMP 251. Computer simulations of stochastic and deterministic systems will be studied, using procedural languages such as FORTRAN and BASIC, and also special simulation-oriented languages. Topics will include the collection and preliminary analysis of input data; verification; validation; design of model experiments; and the analysis and presentation of the results. Students will study and simulate a real-life situation.

QUAN C427 ***Survey of Microcomputers and Office Automation (3 credits)***
Prerequisite: QUAN C222; a course in a computer language, e.g., COMP C241, COMP 251. This

course is designed to explore the role of microcomputers in business. The student will become familiar with the process of evolution of micros, the components of typical systems, the selection and implementation issues, telecommunication, the analysis of benefits of computerization and the role of microcomputers in office automation. The course is comprised of a series of lectures, discussions and labs and students will be provided with "hands-on" experience on a micro. Some of the topics will be covered by experts from the industry.

QUAN C433 ***Topics in Quantitative Methods*** (3 credits)
Prerequisite: Written permission of the Department. This course is intended primarily for Majors students, and allows opportunity for more intensive examination of one or more particular topics in quantitative methods. The specific subject will vary according to the special interest of the professor offering the course in any given year. *NOTE A/See §200.2*
NOTE: Students repeating QUAN C433 register for credits under QUAN C434.

QUAN C444 ***Business Experimental Analysis*** (3 credits)
Prerequisite: QUAN C244 or equivalent; a course in a computer language, e.g., COMP C241, COMP 251. This course deals with the design and the analysis of experiments relevant to the decision-maker in management fields. It includes analysis of variance, orthogonal classification, factorial experiments, block designs, mixed models, replication, calibration studies, economics of experimentation, non-parametric statistical inference, discriminant analysis: All functional areas of management application will be considered and used as examples and in cases.

QUAN C447 ***Statistical Forecasting*** (3 credits)
Prerequisite: QUAN C244 or equivalent; a course in a computer language, e.g., COMP C241, COMP 251. This course presents the foundations of applied time-series analysis for managerial forecasting. It includes forecasting methods and objectives; fundamental concepts in time-series analysis; models for stationary time-series; model for nonstationary time-series; models for seasonal time-series; Box and Jenkins methods; forecast evaluation.

QUAN C448 ***Business Sampling Techniques and Quality Control*** (3 credits)
Prerequisite: QUAN C244 or equivalent; a course in a computer language, e.g., COMP C241, COMP 251. This course consists of two parts: Part I deals with the different sampling methodologies and their applications to managerial problems. Problems relating to sampling of accounts receivable and payable, audit control, accounting information system, evaluation of inventories, market research studies, and assembly line situations, will be studied in detail. Part 2 involves understanding the use of different quality-control charts (C Chart, U Chart, X, and R Charts) in production and marketing environment.

61.110 Business Studies

CERTIFICATE IN BUSINESS STUDIES

This programme is not open to students registered in a programme leading to the degrees of Bachelor of Commerce or Bachelor of Administration.

Students may transfer into the Certificate programme up to twelve credits earned in an incomplete degree or certificate programme or as an Independent or Special student, provided they are students in good standing. The credits that may be so transferred are determined by the University at the point of entry into the programme.

Admission Requirements

a) Diploma of Collegial Studies or the equivalent; MATH C208 and C209 or the equivalent.

or

b) Mature Students: MATH C206, C208, C209 or the equivalent, and a minimum of two years business experience in a supervisory capacity.

30 Certificate in Business Studies

18 ACCO C213, ECON C201*, FINA C314*, MANA C266, MARK C213, QUAN C243

12 Chosen from ACCO C218*, ECON C203, FINA C315, MARK C350, QUAN C222, QUAN C244

**Please note that ACCO C218 is a corequisite and ECON C201 is a prerequisite for FINA C314.*

MINOR IN BUSINESS STUDIES

NOTE: This programme is not open to students registered in a programme leading to the degrees of Bachelor of Commerce or Bachelor of Administration.

Admission Requirements

MATH C208 and C209 or equivalent courses.

30 Minor in Business Studies

18 ACCO C213, ECON C201*, FINA C314*, MANA C266, MARK C213, QUAN C243

12 Chosen from ACCO C218*, ECON C203, FINA C315, MARK C350, QUAN C222, QUAN C244

**Please note that ACCO C218 is a corequisite and ECON C201 is a prerequisite for FINA C314.*

61.120 Economics

Bachelor of Commerce students who wish to follow an Honours or Major programme in Economics may meet the requirements of the Faculties of Commerce and of Arts and Science by following the programmes described below. The course descriptions for Economics courses may be found in §31.080.

Students seeking admission into the Honours programme require approval of the Department, following a recommendation from its Honours Committee.

Bachelor of Commerce students wishing to take a Minor in Economics may do so by selecting 30 credits in Economics in consultation with the Economics Department.

90 BComm Honours in Economics

Year I

6 ECON C201*, C203*
6 QUAN C243, C244[1]
6 MARK C213, FINA C314**
6 ACCO C213, C218
6 MANA C266, QUAN C222

Year II

6 ECON C301, C302
6 ECON C303, C304
6 FINA C315, MARK C350
6 MANA C340, C475
6 ECON elective***

Year III

12 Chosen from ECON C401[3], C403[3], C408[6], C421[3], C422[3], C425[3], C426[3], C432[3], C435[3], C442[3], C443[3]
6 Chosen from 400-level ECON courses
3 QUAN C315
6 MANA C460, and ECON elective in consultation with the Economics Department
3 Elective chosen from within the Faculty of Commerce and Administration or the Department of Economics

A student who has been granted exemptions for ECON C201 or C203 must take an equivalent number of credits in Economics

**ECON C201 is a prerequisite and ACCO C218 is a corequisite for FINA C314.*

***If the student does not have a calculus course and a linear algebra course, ECON C325 and C326 should be taken at this stage.*

[1]*See §200.7*

90 BComm Major in Economics

6 ECON C201*, C203*
6 QUAN C243, C244[1]
6 MARK C213, FINA C314**
6 ACCO C213, C218
6 MANA C266, QUAN C222
6 ECON C301, C302
6 ECON C303, C304
6 FINA C315, MARK C350
6 MANA C340, C475
6 ECON elective
6 ECON elective (400 level)
6 ECON elective
3 QUAN C315
6 MANA C460, and elective, in consultation with the Economics Department
6 Elective
3 Elective chosen from within the Faculty of Commerce and Administration or the Department of Economics

A student who has been granted exemptions for ECON C201 or C203 must take an equivalent number of credits in Economics.

**ECON C201 is a prerequisite and ACCO C218 is a corequisite for FINA C314.*

[1]*See §200.7*

61.130 Computer Science

For a Major in Management Information Systems See §61.100

61.140 Special Programmes in Accountancy

The three professional organizations listed below recognize certain Concordia University courses for course exemptions or standing in their professional designation programmes.

ORDER OF CHARTERED ACCOUNTANTS OF QUEBEC: Chartered Accountant (CA)

The Faculty of Commerce and Administration offers a Diploma in Accountancy which has been approved by the Order of Chartered Accountants of Quebec. Entry into the programme normally requires a Bachelor's degree in Commerce, and a Major in Accountancy with high academic standing. Applicants lacking an appropriate pattern of undergraduate work will be required to complete successfully certain qualifying courses, as assigned by the Director of the diploma programme. For further details, refer to the Concordia University Graduate Studies calendar.

PROFESSIONAL CORPORATION OF INDUSTRIAL ACCOUNTANTS OF QUEBEC: Registered Industrial Accountant (RIA)

Students who wish to follow the RIA programme must register with La Corporation professionnelle des comptables en administration industrielle du Québec, 1425 Mountain St., No. 310, Montreal,

Quebec H3G 1Z3, Tel: 849-5767. A table of courses equivalencies for RIA/CMA and Concordia courses is shown below.

RIA Courses	Concordia University Courses
111 Principles of Accounting	ACCOUNTANCY C213 Financial I
122 Commercial Law	MANAGEMENT C475 Business Law I MANAGEMENT C476 Business Law II
123 Organizational Behaviour	MANAGEMENT C266 Foundations of Modern Management
212 Economics	ECONOMICS C201 Intro to Micro-Economics ECONOMICS C203 Intro to Macro-Economics
229 Intermediate Accounting I	ACCOUNTANCY C323 Intermediate I ACCOUNTANCY C326 Intermediate II
232 Quantitative Methods I	QUANTITATIVE METHODS C243 Introduction to Business Statistics and Decision Models
241 Management Accounting I	ACCOUNTANCY C218 Managerial I
314 Data Processing	COMPUTER SCIENCE C211 Introduction to Computers and Computing *OR* QUANTITATIVE METHODS C222 Introduction to Management Information Systems
324 Taxation	ACCOUNTANCY C441 Taxation I ACCOUNTANCY C442 Taxation II
339 Intermediate Accounting II	ACCOUNTANCY C323 Intermediate I ACCOUNTANCY C326 Intermediate II
341 Management Accounting II	ACCOUNTANCY C303 Cost and Management Accounting
441 Management Accounting III	QUANTITATIVE METHODS C313 Managerial Operations Research QUANTITATIVE METHODS C314 Operations Research and Production Systems or QUANTITATIVE METHODS C315 (for students admitted to the University effective June 1, 1986
442 Financial Management	FINANCE C314 Introduction to Finance I FINANCE C315 Introduction to Finance II
451 Accounting Information Systems	ACCOUNTANCY C414 Information Systems and Control
452 Internal Auditing	ACCOUNTANCY C429 Analytical Auditing

541 Advanced Management Accounting	ACCOUNTANCY C422 Cost and Management Accounting (Advanced) *AND* ACCOUNTANCY C470 Special Topics in Accounting (Note 3)
543 Advanced Financial Accounting	ACCOUNTANCY C335 Advanced *AND* ACCOUNTANCY C470 Special Topics in Accounting (Note 3)
553 Management: Processes	MANAGEMENT C460 Business Policy I ACCOUNTANCY C422 Cost and Management Accounting (Advanced) (Note 3)

NOTES:

1. This table is subject to amendment.

2. A minimum grade of C (60%) is required to obtain an exemption from the Corporation for any of the above courses. Students taking university courses must satisfy the necessary prerequisite courses.

3. The Corporation's examinations in courses 541, 543, and 553 are mandatory. Coaching seminars for these courses are also mandatory prior to writing the Corporation's examinations. A student may not sit for the Corporation's examination in course 553 until all other Corporation courses or their equivalents have been successfully completed.

4. Students completing the Bachelor of Commerce degree programme with the following sequence of courses will be eligible to write the final accreditation exams of the Corporation:

ACCO C323[3]; ACCO C326[3]; ACCO C335[3]; ACCO C303[3]; ACCO C422[3]; ACCO C470[3]; ACCO C414[3]; ACCO C429[3]; ACCO C441[3]; ACCO C442[3]

PROFESSIONAL CORPORATION OF CERTIFIED GENERAL ACCOUNTANTS OF QUEBEC:
Certified General Accountant (CGA)

Students who wish to follow the CGA programme must register with the Professional Corporation of Certified General Accountants of Quebec located at:

152 Notre Dame St. East
Montreal, Quebec H2Y 3P6
Telephone: 861-1823

The list of courses comprising the CGA Academic Programme is shown below:

Accountancy 213	Financial Accounting I
Accountancy 218	Managerial Accounting I
Accountancy 323/326	Intermediate Accountancy I and II
Accountancy 303	Cost and Management Accounting
Accountancy 414	Information System and Control
Accountancy 441/442	Taxation I and II
Accountancy 335 (1)	Advanced Accounting
Accountancy 410 (1)	Specialized Accounting
Accountancy 461 (1)	Accounting Theory
Accountancy 542 (4)	Advanced Taxation (Diploma Programme)
Accountancy 429/432 (2)	Analytical and Financial Auditing
Finance 314/315 (3)	Introduction to Finance I and II
Quantitative Methods 243/244	Introduction to Business Statistics I and II
Management 266	Management Theory and Practice
Management 340	Organization Behaviour
Management 475/478	Business Law I and Company Law
Economics 201/203	Introduction to Micro and Macroeconomics

(1) Prerequisite to the Accounting 521 examination
(2) Prerequisite to the Auditing 517 examination
(3) Prerequisite to the Finance 556 examination
(4) Prerequisite to the Taxation 509 examination

NOTE: The listing above is subject to amendment. Please communicate with the programme coordinator.

61.150 Special Certificate Programmes

There are many organizations within the business community designed to serve the needs of people working in specialized areas of business. These organizations recognize that the educational qualifications of those seeking membership must be continually upgraded. Therefore, they sponsor an Academic Certificate which may be obtained through correspondence courses, or through a lecture programme.

The Faculty of Commerce and Administration cooperates with these business organizations by permitting personnel to register as Special (partial) students, and to take courses leading to a certificate to be awarded by the organization concerned.

Students must comply with the University regulations regarding dates of application and independent (partial) student entrance requirements as outlined in the Academic Calendar §11. In addition, they must meet the requirements of the specific organization.

The credit course taken may be applied towards the Bachelor of Commerce degree, provided the student meets the admission requirements and wishes to transfer from independent (partial) status to undergraduate status after completing a certificate programme. Students are advised that they must meet the Bachelor of Commerce curriculum requirements in force at the date of transfer.

Each certificate programme has one or more special courses required to complete the programme. These courses do not carry credit toward a Bachelor's degree and are designated as non-credit courses.

Students interested in the following certificate programmes may obtain details of required courses from the organization concerned:

The American Marketing Association (Montreal Chapter)
Institute of Canadian Bankers
Association of Human Resources Professionals of the Province of Quebec
The Insurance Institute of Canada
The Trust Companies Institute of Canada
Professional Secretaries International (CPS)

61.160 Concordia Centre for Management Studies

The Concordia Centre for Management Studies is designed to promote continuous and constructive relationships and provide an effective forum for ongoing dialogue among business executives, faculty members and students. In this way, the relevance of the work of the Faculty to the needs of the business community is maintained.

As part of its mandate the Centre operates the Executive Advisory Programme (E.A.P.) which teams business leaders and distinguished faculty to teach advanced seminars in the Faculty's graduate programmes. The participating executives assist the faculty in developing new and relevant topics of study. They add professional insight by joining classes as case discussion leaders, guest lecturers or as active participants. This team approach provides students with the opportunity for guided research in actual business situations and professional counselling in career planning.

The Centre also encourages management development through the conferences and seminars it regularly offers to the business community. In addition, the Centre sponsors the Business Information Days and the Graduate Profile Book. The Business Information Days afford students the opportunity to meet business practitioners from a wide variety of occupations and to discuss the career opportunities available upon graduation. The MBA Profile Book furnishes prospective employers with information on Concordia MBA graduates.

The Centre is a vehicle for reciprocal exchange between the Faculty and business community. Faculty members are kept abreast of current business concerns and problems, and businessmen in turn utilize their technical expertise and research capabilities.

The Centre is governed by a Board of Directors comprised of senior executives from the business community, university administrators, faculty members and representatives of the various student associations.

BOARD OF DIRECTORS

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Dean, Faculty of Commerce and Administration

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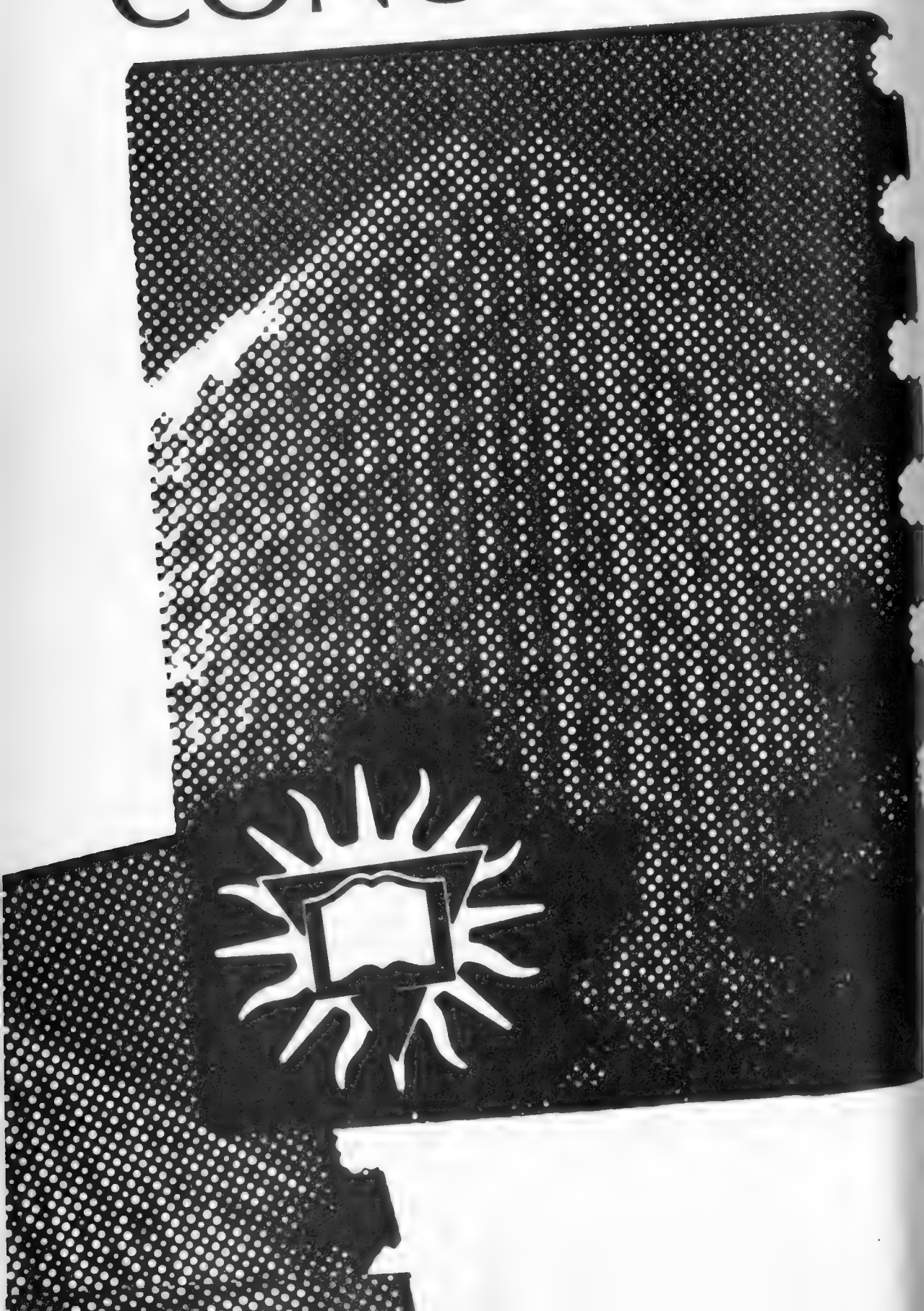
CONCORDIA



71 Faculty of Engineering and Computer Science

71.10 FACULTY OF ENGINEERING AND COMPUTER SCIENCE
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- 71.90.4 Course Requirements

71 Faculty of Engineering and Computer Science

Dean
M.N.S. SWAMY

Vice-Rector, Services, and Associate Professor of Computer Science
GRAHAM MARTIN

Associate Dean, Academic Programmes
J. CHARLES GIGUERE

Assistant Dean, Student Affairs
J.W. ATWOOD

Assistant Dean, Planning and Priorities
G.D. XISTRIS

Director, Centre for Building Studies
PAUL P. FAZIO

Chairman, Department of Civil Engineering
M.M. DOUGLASS

Chairman, Department of Electrical Engineering
J. HAYES

Chairman, Department of Mechanical Engineering
T.S. SANKAR

Chairman, Department of Computer Science
R. DE MORI

71.10 Faculty of Engineering and Computer Science

The following programmes are offered in the Faculty of Engineering:

1. Bachelor of Engineering degrees in Building*, Civil, Computer, Electrical, and Mechanical Engineering.
2. Bachelor of Computer Science degree.
3. Minor in Computer Science.
4. Certificate in Quality Control.

*The BEng degree in Building Engineering may be combined with a Master's degree in the same discipline.

The requirements for the programmes are different, and the appropriate section in the following pages must be consulted for each.

Applications for admission to the BEng or BCompSc programmes are submitted to the Admissions Office at the preferred campus.

General Admission requirements are listed in §13.

71.10.1 REGULAR PROGRAMMES

In addition, the following specific requirements exist for the various programmes. Applicants should specify their choice of programme on their application.

1. BEng (Building, Civil, Computer, Electrical, Mechanical)
BCompSc (General Science, Theoretical Computer Science and Systems Architecture Options)
See Note 3

CEGEP (Profile 10.10)

Mathematics 103
..... 105
..... 203
Physics 101
..... 201
..... 301
Chemistry 101
..... 201
Biology 301

Completion of the above courses is a necessary condition for regular admission to a BEng programme, the minimum length of which will range from 113 to 117 credits depending on the programme chosen. Consideration will be given to a reduction in individual programme length in cases where the student has completed one or more of the CEGEP courses listed below. Corresponding Concordia numbers and credit values are also listed. In no case may a programme be reduced below a minimum of 105 credits.

CEGEP Numbers	Concordia Numbers
242-101*	ENGR 212[2]
242-925 and 935*	ENGR 213[2]
205-901	CIVI 231[2.75]
221-322	CIVI 271[3]
201-307	EMAT 271[3]

*Other CEGEP courses in graphics will be considered on an individual basis.

2. BCompSc (Information Systems Option)
Certificate in Quality Control
Minor in Computer Science
See Note 3

CEGEP (Profile 10.12)

Mathematics 103
..... 105
..... 203

Notes:

1. Applications from graduates of CEGEP technology programmes will also be considered. Programme requirements for successful applicants will be determined on an individual basis.

2. Students in the BEng (Bldg) programme wishing to enter the combined degree programme (BEng and MEng in Building Engineering) must apply to the Assistant Dean, Student Affairs during the term in which they will be completing all but one of the required 200 and 300 level courses. A high standing is required for admission to the combined programme.

3. Students entering the Faculty of Engineering and Computer Science are presumed to have acquired some familiarity with computers and programming, either through a course or through time spent working with a personal or other computer.

71.10.2 MATURE ENTRY

Admission requirements are listed in §14.

71.10.3 EXTENDED CREDIT PROGRAMME

Students admitted to an extended credit programme under the provisions of Sections 13.4.2 or 13.11 must successfully complete the requirements set out below:

Bachelor of Engineering

The individual programme requirements as set out elsewhere in Section 71, plus:

MATH C202[3], C203[3], C204[3], C205[3]
PHYS C204[3], C205[3], C224[1], C225[1],
PHYS C206[3] (Electrical, Computer Engineering only)
CHEM C205[3]
INTE 298[3]*

**NOTE: INTE 298A (see Academic Timetable) - Special Topic - Computer Literacy.*

Bachelor of Computer Science

A minimum of 120 credits including:

90 Programme requirements as set out in Section 71.80
3 INTE 298[3]*
12 MATH C202[3], C203[3], C204[3], C205[3]
15 Additional credits, as indicated below:

a) *General Science, Theoretical Computer Science and Systems Architecture options:*
CHEM C205[3]
PHYS C204[3], C205[3], C224[1], C225[1]
and 4 credits chosen from
BIOL C201[3]
CHEM C206[3]
ECON C201[3], C203[3]
ESL C207[3], C208[3]
PHYS C206[3], C207[3], C226[1]

b) *Information Systems option:*
15 elective credits chosen from outside the Faculty of Commerce and Administration and the Department of Computer Science.

**NOTE: INTE 298A (see Academic Timetable) - Special Topic - Computer Literacy.*

71.10.4 ACADEMIC REGULATIONS

Students should refer to the section presenting the Academic Regulations of the University, §16.

71.10.5 ADDITIONAL REGULATIONS FOR THE BACHELOR OF ENGINEERING/BACHELOR OF COMPUTER SCIENCE

Definitions

Assessable courses: *All record entries of courses* listed in this Concordia calendar for which a grade point value has been assigned.

Dean's office: Appropriate member of the Dean's office, normally, the Assistant Dean, Student Affairs.

Programme of Study: Course requirements in effect at the time of the latest admission or re-admission to a degree programme, for example, BEng (Civil) or B.Comp.Sc. (General Science) including modifications on individual basis as specified or approved in writing by the Dean's Office, or the Student Request Committee of Faculty Council.

Grade Points (GP): As defined in Section 16 of this calendar.

Weighted Grade Point Average (WGPA): This is defined as:

$$WGPA = \frac{\sum_{i=1}^{N} CR_i \times GP_i}{\sum_{i=1}^{N} CR_i}$$

where CR is the credit value of the course as listed in the current calendar.

Example:

Course	Credits	Grade	Grade Points
AA	3.00	D	1.0
BB	3.00	C+	2.3
CC	4.00	B	3.0

$$WGPA = \frac{3.00 \times 1.0 + 3.00 \times 2.3 + 4.00 \times 3.00}{3.00 + 3.00 + 4.00} = 2.19$$

Academic Year: A period of time which includes a Summer and its subsequent Fall and Winter terms.

Objectives

The objectives of these regulations are: a) to ensure that the Faculty can certify that all of its graduates are qualified to enter their profession,

b) to ensure that students can, with the assistance or intervention of the Faculty, assess themselves objectively, and plan programmes of study designed to meet their individual needs.

Grading System

See §16.3 for the Concordia grading system. Results for courses specified in §71 for the BEng/BCompSc degrees are to be submitted as letter grades only, (e.g. C-, B+, A).

Regulations

1. Students' standings are assessed at the end of each academic year providing they have registered for at least 12 credits subsequent to their previous assessment, or in the case of a first assessment, subsequent to their admission to a programme of study.

Standings of students

a) who are being considered for the award of a degree, namely, have applied for graduation and have registered for all courses in their programme of study, and

b) who have registered for fewer than 12 credits since their last assessment, and

c) who were in acceptable standing at the time of their last assessment

will be determined on the basis that these constitute an extension of the last assessment period. Students meeting conditions a) and b) above but not c) will be assessed on the basis of courses taken since their last assessment.

A grade obtained as a result of writing a supplemental examination and/or completing the work for a course graded INC or MED is included as part of the assessment period in which it is recorded.

2. Students' standings are determined according to the following criteria:

Acceptable standing:

A WGPA of at least 2.00 with a maximum of 1 failure if 24.00 or fewer credits have been registered for or 2 failures if more than 24.00 credits have been registered for.

Conditional Standing

A WGPA of at least 1.50 with a maximum of 2 failures if 24.00 or fewer credits have been registered for or 3 failures if more than 24.00 credits have been registered for.

Failed Standing

Failure to meet the criteria for acceptable or conditional standings, or conditional standings over two consecutive assessments.

3. Students in Acceptable Standing may proceed subject to the following conditions: any failing grade must be cleared by passing the supplemental examination and/or completing the work for the course or by repeating the failed course or in the case of an elective, by replacing the failed course by an alternative within the same group electives. Any variation must be approved by the Dean's Office.

4. Students in Conditional Standing may proceed subject to the following conditions.

a) They must repeat successfully all courses in which failing grades were obtained, or replace them by alternatives approved by the appropriate member of the Dean's Office in consultation with the student's department.

b) They must repeat or replace by approved alternatives at least one-half of those courses in which they obtained grades in the 'D' range. The specific courses to be repeated will be determined by the appropriate member of the Dean's Office in consultation with the student's department.

c) Courses to be taken may be specified by the Dean's Office. In no case will the number exceed five per term for full-time students and two per term for part-time students.

d) They must obtain acceptable standing at the time of their next assessment.

5. Failed students who are not subject to regulation 6 below may apply for readmission through the Dean's Office. If readmitted, they will be placed on academic probation. They must return to acceptable standing at the time of their next assessment. Other conditions will be determined at the time of readmission.

6. Failed students who were previously classed as failed students must withdraw from the University.

Registration Regulations

Students (other than failed students) whose registration in the programme has lapsed for 30 consecutive months or more must apply to the Dean's Office in order to have their curriculum obligations re-evaluated as per paragraph 2 of §16.2.1 of this calendar. Permission to register will be granted only upon presentation of the results of this re-evaluation.

Students in a BEng programme registering for courses above the 200 level must do so on a full-time basis, that is, they must register for a minimum of 12 credits in each of the Fall and Winter terms. Exceptions will be made by the Dean's Office only in cases where students require fewer than 12 credits to complete their programme.

Graduation Requirements

Students must satisfy all course requirements and be in acceptable standing.

71.10.6 AVAILABILITY OF PROGRAMMES

Methods of progressing through a programme of Engineering or Computer Science at Concordia are shown in the table below. Students in the Engineering programme will also choose a 6- or 8-term sequence. Due to the heavy workload involved, 6-term sequences are only recommended for the exceptional student. Further information on sequencing may be found in the Programme Guide issued by the Associate Dean, Academic Programmes.

January Entrants

Depending on the availability of space, the Faculty may admit in January a limited number of part-time students. Admission to a full-time programme will only be considered for the September session.

Industrial Parallel Studies (IPS)

Attention should be given to a programme unique to Concordia, that of Industrial Parallel Studies. IPS are available at the Sir George Williams Campus. They are offered for students who have successfully completed the First Year of the programme, or its equivalent, and whose employers are prepared to certify that they will be employed for a maximum of 20 hours per week during the Fall/Winter Sessions. The Faculty timetable is arranged to allow students undertaking IPS to attend

the University for either five half days or two and one-half days per week.

Priority for IPS is given to students who have completed the First Year of the programme in the Evening. All students undertaking such studies must have been granted permission by the office of the Assistant Dean, Student Affairs, Engineering and Computer Science. The pamphlet Industrial Parallel Studies, giving more detailed information, can be obtained upon request from the Assistant Dean's Office.

TABLE 1 *AVAILABILITY OF PROGRAMMES*

S—Sir George Williams Campus
L—Loyola Campus

	COMPLETE PROGRAMME		PARTIAL PROGRAMME	
	Full-time	Part-time	Full-Time	Part-time
BEng				
Building	S			S**
Civil	S		L*	S**
Computer	S		L*	S**
Electrical	S		L*	S**
Mechanical	S		L*	S**
BCompSc				
Information Systems	S,L	S,L		
General Science	S,L	S,L		
Systems Architecture	S		L*	S**
Theoretical Computer Science	S,L	S,L		
Minor in Computer Science	S,L	S,L		
Certificate in Quality Control		L		

* Students may complete the first third of their programme at the Loyola Campus. They must transfer to the Sir George Williams Campus for the final two thirds.
** Students must transfer to full-time studies after completion of the first third of the programme.

71.20 Bachelor of Engineering

71.20.1 CURRICULUM FOR THE DEGREE OF BACHELOR OF ENGINEERING

The University offers programmes leading to the degree of Bachelor of Engineering in the fields of Building, Civil, Computer, Electrical, and Mechanical Engineering. Students enrolled in the BEng programme in Building Engineering may, after the completion of all but one of their 200 and 300 level courses, apply through the Associate Dean, Academic Programmes to enter a combined degree programme leading to the joint award of a Bachelor's and Master's degree in this field. To be recommended for the degree of Bachelor of Engineering, students must satisfactorily complete all course requirements for the programme in which they are registered and achieve acceptable standing. Course requirements include the engineering core as defined in §71.20.4, programme core and option requirements. These are given in subsequent sections. They comprise a group of required courses with a group of elective courses which allow students to select part of their programme to provide some depth in an area of specialization according to their particular interests, or breadth in the general field of their chosen discipline.

In their final undergraduate year, students with high standing may apply for permission through the Associate Dean's Office to register for a limited number of graduate courses offered by the Faculty in lieu of some courses in the undergraduate programme.

Successful completion of a BEng programme requires hard work and considerable dedication on the part of each student. Courses are presented with the expectation of an average of about two hours of 'outside' work for each lecture hour and about one-half hour of 'outside' work for each hour spent in the laboratory for all programmes of study.

71.20.2 ACCREDITATION BY THE CANADIAN COUNCIL OF PROFESSIONAL ENGINEERS

The baccalaureate degree programmes in Civil, Building, Computer, Electrical and Mechanical Engineering are accredited by the Canadian Accreditation Board of the Canadian Council of Professional Engineers. The Board has recommended to the Constituent Associations of CCPE that graduation from the above curricula be considered as sufficient academic qualification for purposes of registration in all Provinces and Territories in Canada.

71.20.3 MEMBERSHIP IN THE ORDER OF ENGINEERS OF QUEBEC

The Ordre des Ingénieurs du Québec (O.I.Q.) has fully accredited the Bachelor of Engineering curricula in Building, Civil, Computer, Electrical, and Mechanical Engineering, and will admit graduates of these five programmes as members according to the Engineers Act and the O.I.Q. By-Laws and providing applicants can complete the French language requirements.

Quebec law now requires that candidates seeking admission to provincially-recognized Quebec professional corporations (such as the Ordre des Ingénieurs du Québec) be tested on their ability in the French language.

Information on this testing programme of the Office de la langue française may be obtained by writing to: Office de la langue française, 800 Place Victoria, 15e étage, Montréal, Québec, H4Z 1G8, telephone: 873-8361.

71.20.4 ENGINEERING CORE

To be recommended for the degree of Bachelor of Engineering, students admitted after January 1984 must satisfactorily complete the following courses as well as those specified for their programme as shown in subsequent sections. Students admitted for January 1984 or earlier should consult the Programme Guide available in the Associate Dean's Office.

EMAT 212*	Calculus and Differential Equations	3.00
EMAT 232*	Matrices and Advanced Calculus	3.00
EMAT 271*	Applied Probability and Statistics	3.00
EMAT 391	Numerical Methods in Engineering	3.00
ENGR 212*	Technical Drawing	2.00
ENGR 273*	Basic Circuit Analysis	3.75
ENGR 281*	Technical Writing	2.00
ENGR 402	Engineering Law	1.50
ENGR 410**	Technical Report	1.50

6 credits chosen from the 'Social Aspects of Engineering' group.***

ENGR 491	Engineers and Society	3.00
ENGR 492	Historical Impact of Technology on Society	3.00
ENGR 493	Engineering Resources and Environment	3.00
ENGR 494	Effect of Technology on the Person	3.00
ENGR 495	Technology Assessment and Control	3.00
ENGR 496	Science Policy and Engineering Innovation	3.00
		28.75

*Offered in both Day and Evening.

**To be submitted at the beginning of the academic year in which the student expects to graduate.

***Students in Building Engineering must successfully complete BLDG 481 as part of the 6 credit requirement. (For all students, 3 of these 6 credits may be replaced by a specified course or courses in French, or by other non-technical courses subject to the approval of the Assistant Dean, Student Affairs. A list of such courses is available from the Assistant Dean's Office.)

71.20.5 SCHEDULING OF COURSES

A programme guide indicating course schedules for both the 6 and 8 term Engineering and Computer Science sequences is available from the Faculty Office on either campus.

71.30 Centre for Building Studies

Director and Professor of Building Engineering
PAUL P. FAZIO

Associate Director and Associate Professor
T. STATHOPOULOS

Professors
DOREL FELDMAN
CEDRIC MARSH

Associate Professors
RICHARD W. GUY
H. KINH HA
J.C. WANG

Assistant Professors
CLAUDE BEDARD
R. EL-DIASTY
W.P. HUTNY
O. MOSELHI
N.S. HARI MURTHY
MARVIN M. SHAPIRO

Adjunct Professors
F. ERNST
J.C. HUOT

Adjunct Associate Professor
A.D. RUSSELL

Adjunct Assistant Professor
N. LOW

Building Engineering, as a discipline, encompasses the body of knowledge which pertains to all phases in the life-cycle of a constructed facility, namely conception, planning, design, construction, operation and disposal.

Concordia has developed a unique undergraduate programme leading to a BEng in Building Engineering designed to meet the needs of the construction industry for engineers familiar with the overall design of built facilities.

In addition to the basic engineering sciences, the programme emphasizes the fundamentals of building materials, structural analysis and design, building services: acoustical, heating, lighting, air conditioning, economics and project management. The student also has available certain electives which will be of use in the design of various phases of a building.

Students who complete all but one of their 200 and 300 level courses with a sufficiently high standing may apply through the Associate Dean, Academic Programmes to enter a combined programme leading to the joint award of both a BEng and an MEng degree in Building Engineering. It is expected that those who aspire to leadership roles within the building industry will enter such a combined programme. The combined programme requires a further 12 months of full-time study, after which graduates will not only have obtained further grounding in the basics, but will also have specialized in one of four branches: Building Science, Building Environment, Building Structures, Construction Management. For details of the Graduate Component, refer to the graduate calendar.

71.30.1 COURSE REQUIREMENTS

The programme in building engineering consists of the Engineering Core, the Building Programme Core, and a further 9 elective credits chosen from a specified group of courses. The nominal length of the programme is 115.75 credits. Adjustments may be made on an individual basis as per §71.10.1.

Engineering Core (28.75 credits)

See §71.20.4. Note that students in the BEng (Bldg) programme must replace one of the required Social Aspects courses with BLDG 481.

Building Engineering Core

		Credits
BLDG 341	Building Engineering Systems	3.00
BLDG 363	Building Science I	4.00
BLDG 364	Building Science II	4.00
BLDG 371	Building Service Systems	3.00
BLDG 401	Building Economics	3.00
BLDG 461	Building Enclosure Design	3.00
BLDG 471	HVAC System Design	3.00
BLDG 476	Heat Transfer in Buildings	3.00
COMP 212	FORTRAN for Engineers and Scientists	3.00
EMAT 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 213*	Descriptive Geometry	2.00
ENGR 242*	Statics	3.00
ENGR 243*	Dynamics	3.00
ENGR 244*	Mechanics of Materials	3.75
ENGR 251*	Thermodynamics I	3.00
ENGR 342	Structural Analysis I	2.00
ENGR 343	Structural Analysis II	3.00

ENGR 344	Structural Design I	3.00
ENGR 345	Structural Design II	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 362	Fluid Mechanics II	3.75
ENGR 451	Construction Engineering	3.00
CIVI 271**	Surveying	3.00
CIVI 321	Engineering Materials	3.75
CIVI 431	Soil Mechanics	3.75
		78.00

* Offered in both Day and Evening.
** Summer school to be taken before entering second year of BEng programme.

Elective Courses

A student must choose a minimum of 9 credits from the following list of elective courses.

		Credits
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50
CIVI 435	Foundation Design	3.50
BLDG 459	Computer Aided Building Design	3.00
BLDG 462	Modern Building Materials	3.00
BLDG 465	Fire and Smoke Control in Buildings	3.00
BLDG 472	Building Energy Conservation Technologies	3.00
BLDG 473	Building Acoustics	3.00
BLDG 474	Building Illumination	3.00
BLDG 491	Labour and Industrial Relations in Construction	3.00
BLDG 492	Construction Methods	3.00
BLDG 493	Legal Issues in Construction	3.00
ENGR 452	Matrix Analysis of Structures	3.00
ENGR 455	Introduction to Structural Dynamics	3.00

71.40 Department of Civil Engineering

Associate Professor and Chairman of the Department
M.M. DOUGLASS

Professors
O.A. PEKAU
H.B. POOROOSHASB
A.S. RAMAMURTHY
M.S. TROITSKY
Z.A. ZIELINSKI

Associate Professors
B. ASHTAKALA
C. GOLDMAN
A.M. HANNA

Assistant Professors
B.B. BUDKOWSKA
Y.J. LU
S. SARRAF

Adjunct Professors
S. NASSER
G.N. PANDE
A.H. SOLIMAN

Adjunct Associate Professors
B.L. CARBALLADA
N.S. VERMA

Adjunct Assistant Professors
H.M.S. KEIRA
P.K. SYAMAL

Visiting Scientist
M.R. MADHAV

Civil Engineering is primarily concerned with the creation of the complex systems of construction facilities for sound economic growth of the community. In a broad sense, civil engineers learn to control and modify the environment effectively so as to satisfy the needs and desires of society. Their responsibility for design ranges from foundations and superstructures of our common structures such as buildings, bridges, dams, tunnels, wharves, etc., to many unusual structures such as rocket installations, containment vessels for nuclear reactors, supports for radio telescopes, frameworks for aircraft. In addition, civil engineers are concerned with the engineering aspects of water resources, rivers, harbours, irrigation and drainage; with the disposal of wastes and the control of the quality of air and water; with highways, railroads, airports and other transportation facilities; with measuring, mapping and interpreting the physical conditions of the surface of the earth; and with planning metropolitan areas and conducting and managing their public facilities.

The programme is designed so that students, after having obtained grounding in the fundamentals of Civil Engineering, may specialize in one of two options.

71.40.1 COURSE REQUIREMENTS

The programme in Civil Engineering consists of the Engineering Core, the Civil Programme Core, and one of the options described below. The nominal length of the programme is 116.00 credits. Adjustments may be made on an individual basis as per §71.10.1. Students admitted prior to September 1984 should consult the programme guide available from the Assistant Dean's Office to determine their individual course requirements.

Engineering Core (28.75 credits)
See §71.20.4.

Civil Programme Core

		Credits
EMAT 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 213*	Descriptive Geometry	2.00
ENGR 242*	Statics	3.00
ENGR 243*	Dynamics	3.00
ENGR 244*	Mechanics of Materials	3.75
ENGR 251*	Thermodynamics I	3.00
ENGR 342	Structural Analysis I	2.00
ENGR 343	Structural Analysis II	3.00
ENGR 344	Structural Design I	3.00
ENGR 345	Structural Design II	3.00
ENGR 361	Fluid Mechanics I	3.00
ENGR 362	Fluid Mechanics II	3.75
ENGR 403	Engineering Economy	1.50
ENGR 451	Construction Engineering	3.00
CIVI 231*	Geology	2.75
CIVI 271**	Surveying	3.00
CIVI 321	Engineering Materials	3.75
CIVI 341	Civil Engineering Systems	3.00
CIVI 372	Transportation Engineering	3.00

CIVI 381	Water Resources Engineering	3.50
CIVI 431	Soil Mechanics	3.75
CIVI 481	Water Supply Systems	3.50
COMP 212	FORTRAN for Engineers and Scientists	3.00
		69.25

*Offered in both Day and Evening.

**Summer school to be taken before entering second year of study in the BEng programme.

Option Course Requirements

Students must have a mimimum of 12 credits from one of Option A or Option B and 6 further elective credits from either option.

Option A

		Credits
CIVI 434	Geotechnical Analysis	3.00
CIVI 435	Foundation Design	3.50
CIVI 436	Mechanics of Geotechnical Materials	3.00
CIVI 451	Advanced Structural Analysis	3.50
CIVI 453	Design of Reinforced Concrete Structures	3.50
CIVI 454	Design of Steel Structures	3.50
CIVI 461	Continuum Mechanics	3.00
ENGR 452	Matrix Analysis of Structures	3.00
ENGR 455	Introduction to Structural Dynamics	3.00

Option B

CIVI 441	Civil Engineering Systems Analysis	3.00
CIVI 471	Highway Design	4.50
CIVI 472	Traffic Engineering	3.00
CIVI 474	Urban Transportation Planning	3.00
CIVI 482	Urban Sanitation	3.50
CIVI 483	Hydrology	3.50
CIVI 484	Hydraulic Engineering	3.50
CIVI 485	Hydraulic Structures	3.50

71.50 Department of Electrical Engineering

Professor and Chairman of the Department
J.F. HAYES

Professors
B.B. BHATTACHARYYA
STANLEY J. KUBINA
BELA A. LOMBOS
V. RAMACHANDRAN
M.N.S. SWAMY
K. THULASIRAMAN

Associate Professors
M.O. AHMAD
A.J. AL-KHALILI
A. ELHAKEEM
J.C. GIGUERE
SERGE A. GRACOVETSKY
T. LE-NGOC
JAMES F. LINDSAY
V. PANUSKA
R.V. PATEL
M.H. RASHID
O. SCHWELB
C. TRUEMAN
P.D. ZIOGAS

Assistant Professors
N. DIMOPOULOS
B. SARIKAYA

Adjunct Professors
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H. FARFAN
S.D. MORGERA
F. REZA
P.K. VERMA

Adjunct Associate Professors
E. CERNY
G.E. SEGUIN
V. STEFANOVIC

Adjunct Assistant Professors
S.M. FARUQUE
W.W. KOTIUGA
K. RAMU
V.K. SOOD

Visiting Associate Professors
A.K. BHATTACHARYYA
C.S. GARGOUR

Visiting Assistant Professor
S. ARABI

Research Associates
M. MEHMET ALI
H. FARIDANI

The Department of Electrical Engineering offers two distinct programmes, one of which leads to the Bachelor of Engineering in **Electrical Engineering,** the other to the Bachelor of Engineering in **Computer Engineering.**

Electrical Engineering is concerned primarily with energy and information: their conversion, transformation and transmission in the most efficient, convenient and reliable manner. Computer Engineering, on the other hand, focuses more directly on the design and use of computer technology for information processing.

Computer and electrical engineers are involved in the processing and transmission of information. The revolution in electronics which began some thirty years ago with the invention of the transistor, and which continues today through the advent of the microprocessor, has had a profound impact not only on our capability to communicate with each other or to store masses of easily retrievable information about ourselves, but also on our ability to construct 'intelligent' machines. This production both of new devices, and of sophisticated applications for these devices (for example in bio-medical engineering) continues apace. While contributing to what has been, and will continue to be, a major transformation in the structure of our society, electrical and computer engineers may, in the course of their careers, be engaged in a variety of activities: research, development, design, manufacture, operation, maintenance, control, and marketing of devices and systems. In so doing, they will be called upon to assist or direct the efforts of other engineers, individuals or groups of people of widely varying backgrounds and abilities.

Electrical engineers are also involved in the conversion of energy from its original mechanical, thermal, nuclear, wind or solar form to electricity. They have primary responsibility for the design and control of continent spanning power grids which are used to transport this energy from generating stations to the consumer, as well as for designing efficient converters which will transform this energy back into forms which meet the needs of the user for heat, refrigeration, light, electromechanical devices of all types, and for the running of a host of electronic communications and data processing systems.

Therefore, electrical and computer engineers must receive ■ professional education of great breadth and depth. Great emphasis is placed at Concordia on giving the student a solid foundation in mathematics, electrical and computer engineering fundamentals and design techniques so that they will be equipped both to contribute and to respond to a rapidly evolving technology. Of equal importance, though much less time is devoted to it in the curriculum, is the fostering of an

awareness of the interaction of the profession and the society it serves, and of the ability to communicate effectively both with colleagues and with fellow citizens.

71.50.1 COURSE REQUIREMENTS (BENG IN ELECTRICAL ENGINEERING)

The programme in Electrical Engineering consists of the Engineering Core, §71.20.4, the Electrical Programme Core shown below, and one of three elective options. The nominal length of the programme is 115.50 credits. Adjustments may be made on an individual basis as per §71.10.1.

Students admitted prior to September 1984 should consult the Programme Guide available in the Associate Dean's Office.

Engineering Core (28.75 credits)
See §71.20.4.

Electrical Engineering Core

		Credits
COMP 212	FORTRAN for Engineers and Scientists	3.00
EMAT 252	Complex Variables	3.00
EMAT 312	Laplace Transforms and Advanced Differential Equations	3.00
ENCS 245*	Introduction to Mechanical Analysis	3.00
ENGR 274*	Physical Systems and Measurements	3.75
ENGR 372	Fundamentals of Control Systems	3.75
ENGR 403	Engineering Economy	1.50
ELEC 251*	Fundamentals of Electromagnetics	3.00
ELEC 311	Electronics I	4.50
ELEC 312	Electronics II	4.50
ELEC 321	Electrical Properties of Materials	3.00
ELEC 331	Electromechanics	4.50
ELEC 341	Linear Network Analysis	3.00
ELEC 351	Electromagnetic Waves and Guiding Structures	3.00
ELEC 401	Electrical Engineering Seminar	1.00
ELEC 461	Communication Circuits and Systems	3.75
COEN 311	Computer Organization and Software	3.75
COEN 412	Digital Electronics	3.75
COEN 413	Logic Design I	3.75
		62.50

*Offered in both day and evening.

Technical Electives

Programme Requirements include the completion of one of three options.

Students may replace one course from within their option by a technical elective from another electrical engineering option. No special permission is required.

1. Electronics/Communications Option

Students must complete a minimum of 24.25 credits from:

		Credits
COMP 291	Language Laboratory - Pascal	1.00
COEN 414	Sequential Circuits	3.75
COEN 417	Microprocessor Systems	4.50
ELEC 411	Pulse Circuits	4.50
ELEC 415	Electronics III	4.50
ELEC 421	Solid State Devices	3.75
ELEC 422	Integrated Circuit Design	4.50
ELEC 441	Modern Filter Design	3.75
ELEC 442	Digital Filters	3.00
ELEC 453	Microwaves and Optics: Transmission	3.75
ELEC 454	Microwaves and Optics: Circuits	3.75
ELEC 455	Acoustics	3.00
ELEC 462	Statistical and Digital Communications	3.75
ELEC 481	Electrical Engineering Project	4.00
ELEC 498	Topics in Electrical Engineering	3.00
ENGR 472	System Optimization	3.75

2. Power Option

Students must complete:

		Credits
ELEC 333	Electric Machines	3.75
ELEC 431	Electrical Power Systems	3.75
ELEC 433	Static Power Converters	3.75

Students must also choose a minimum of 13.00 credits from:

		Credits
COMP 291	Language Laboratory - Pascal	1.00
COEN 414	Sequential Circuits	3.75
COEN 417	Microprocessor Systems	4.50
ENGR 471	Time Domain Analysis and Design	4.00
ENGR 472	System Optimization	3.75
ENGR 473	Control System Design	3.75
ELEC 411	Pulse Circuits	4.50
ELEC 481	Electrical Engineering Project	4.00
ELEC 498	Topics in Electrical Engineering	3.00
INDU 323	Industrial Operations Research	3.00

3. Systems Option
Students must complete:

		Credits
ENGR 471	Time Domain Analysis and Design	4.00
ENGR 472	System Optimization	3.75
ENGR 473	Control System Design	3.75

Students must also choose a minimum of 12.75 credits from:

		Credits
COMP 291	Language Laboratory - Pascal	*1.00*
COEN 414	Sequential Circuits	*3.75*
COEN 417	Microprocessor Systems	*4.50*
ELEC 431	Electrical Power Engineering	*3.75*
ELEC 441	Modern Filter Design	*3.75*
ELEC 442	Digital Filters	*3.00*
ELEC 462	Statistical and Digital Communications	*3.75*
ELEC 481	Electrical Engineering Project	*4.00*
ELEC 498	Topics in Electrical Engineering	*3.00*
INDU 323	Industrial Operations Research	*3.00*

71.50.2 COURSE REQUIREMENTS (BENG IN COMPUTER ENGINEERING)

The programme in Computer Engineering consists of the Engineering Core, §71.20.4, the Computer Engineering Programme Core, and a minimum of 10.75 elective credits chosen from a specified group of courses. The nominal length of the programme is 113.00 credits. Adjustments may be made on an individual basis as per §71.10.1.

Engineering Core: (28.75 credits)
See §71.20.4

Computer Engineering Core

		Credits
EMAT 252	Complex Variables	3.00
EMAT 312	Laplace Transforms and Advanced Differential Equations	3.00
ENGR 274*	Physical Systems and Measurements	3.75
ENGR 372	Fundamentals of Control Systems	3.75
ENGR 403	Engineering Economy	1.50
ELEC 311	Electronics I	4.50
ELEC 312	Electronics II	4.50
ELEC 341	Linear Network Analysis	3.00
ELEC 353	Basic Electromagnetics and Transmission Line Theory	3.00
ELEC 401	Electrical Engineering Seminar	1.00
ELEC 461	Communication Circuits and Systems	3.75
COMP 244	Programming Methodology	3.00
COMP 291	Language Laboratory - Pascal	1.00
COMP 293	Language Laboratory - FORTRAN	1.00
COMP 343	Operating Systems	3.00
COMP 352	Data Structures and Algorithms	3.00
COMP 385	Systems Programming Laboratory II	1.00
COEN 231**	Introduction to Discrete Mathematics	3.00
COEN 311	Computer Organization and Software	3.75
COEN 412	Digital Electronics	3.75
COEN 413	Digital Systems Design	3.75
COEN 414	Sequential Circuits	3.75
COEN 416	Design of Digital Computers	3.00
COEN 417	Microprocessor Systems	4.50
COEN 431	Software Engineering	3.00
		75.25

* Offered in both Day and Evening.
** COMP 231 allowed as substitute.

Computer Engineering Electives (Minimum of 9.00 credits)

		Credits
ENCS 245	Introduction to Mechanical Analysis	3.00
ENCS 454	Introduction to VLSI	3.00
ENCS 455	Introduction to VLSI Architecture	3.00
ENCS 471	Robotics	3.00
ENGR 471	Time Domain Analysis and Design	4.00
ELEC 442	Digital Filters	3.00
ELEC 462	Statistical and Digital Communications	3.75
COEN 418	Advanced Concepts in Microcomputer Systems Architecture and Design	4.50
COEN 481	Computer Engineering Project	4.00
COEN 498	Topics in Computer Engineering	3.00
COMP 335	Introduction to Theoretical Computer Science	3.00
COMP 353	Files and Databases	3.00
COMP 442	Compiler Design	3.00
COMP 451	Database Design	3.00
COMP 471	Computer Graphics	3.75

COMP 472	Introduction to Artificial Intelligence	3.00
COMP 473	Pattern Recognition	3.00
COMP 474	Introduction to Expert Systems	3.00

71.60 Department of Mechanical Engineering

Professor and Chairman of the Department
T.S. SANKAR

Professors
R.M.H. CHENG
W.G. HABASHI
C.K. KWOK
S. LIN
H.J. MCQUEEN
M.O.M. OSMAN
S. SANKAR

Associate Professors
R.B. BHAT
F.D. HAMBLIN
V.S. HOA
K.I. KRAKOW
T. KREPEC
R.A. NEEMEH
J. SVOBODA
G.D. XISTRIS

Assistant Professors
A.E. BLACH
A. HEMANI
V. LATINOVIC
A.J. SABER
J. VATISTAS

Adjunct Professors
R.V. DUKKIPATI
G.M. MCKINNON

Adjunct Associate Professors
D. KENNY
S. LE QUOC
D.F. MATEESCU
M. SAMAHA

Adjunct Assistant Professors
N.G. ATTIA
W.S. BERCZYNSKI
C.D. CHOMSKI
A.E. FAHIM
E. HASHISH
V. JHA
A. SATYANARAYANA

Research Associate Professor
V.I. FABRIKANT

Research Assistant Professor
S. RAKHEJA

As in all branches of professional engineering, mechanical engineers are concerned with the creation of devices, systems, structures, and processes for human use. Their task is to apply scientific, mathematical, economic and social knowledge to satisfy specific needs. The services required of mechanical engineers encompass a very wide range of professional activity, such as design, research, development and management carried out in environments of equally diverse nature, such as industry, medicine, private practice, university and government.

Representative fields of endeavour for mechanical engineers include all forms of power generating equipment (steam, internal combustion, nuclear, jet rocket, fuel cells), the design of mechanisms and machines, controls and automation, vibration analysis, environmental control (heating, ventilation and refrigeration), materials handling and precision measurement.

Any of the specific fields may involve the design, construction and control of machines and equipment as well as the research and development of new processes, materials and techniques.

In view of the very wide range of activities in the field, the mechanical engineering curriculum consists of a combination of core courses with a series of technical electives. Strong emphasis is given to building on the principles presented in the basic engineering science and physical systems courses of the Engineering Core. Further core courses are taken by all mechanical engineering undergraduates and deal with topics basic to the field, including thermodynamics, fluid mechanics, machine design and metallurgy. Technical electives allow students to obtain some specialization in a particular area of the field, depending on their interests and expected future professional activity. Three options of about 19 credits each are available in **Thermo Fluid and Propulsion Engineering** (Option A), **Design and Production Engineering** (Option B), and in **Automation and Control Systems** (Option C).

A fourth option, of about 43 credits, is offered in **Industrial Engineering** (Option D). This option is designed to give students the background needed to define and solve problems related to the conception or improvement and implementation of integrated industrial systems involving people, materials and money. Students wishing to enter the industrial engineering option should apply to the Chairman, Mechanical Engineering Department, preferably prior to the completion of the first year of study or of 30 credits in their programme.

71.60.1 COURSE REQUIREMENTS

The programme in Mechanical Engineering consists of the Engineering Core, §71.20.4, the Mechanical Programme Core and option

requirements as shown below. The nominal length of the programme is 117 credits. Adjustments may be made on an individual basis as per §71.10.1.

Students admitted prior to September 1984 should consult the Programme Guide available in the Associate Dean's Office.

Mechanical Engineering Core

		Credits
COMP 212	FORTRAN for Engineers and Scientists	3.00
ELEC 318	Industrial Electronics	3.75
EMAT 311	Transform Calculus and Partial Differential Equations	3.00
ENGR 213*	Descriptive Geometry	2.00
ENGR 242*	Statics	3.00
ENGR 243*	Dynamics	3.00
ENGR 244*	Mechanics of Materials	3.75
ENGR 251*	Thermodynamics I	3.00
ENGR 274*	Physical Systems and Measurements	3.75
ENGR 361	Fluid Mechanics I	3.00
ENGR 372	Fundamentals of Control Systems	3.75
MECH 221	Materials Science	2.00
MECH 311	Mechanical Engineering Laboratory I	2.50
MECH 313	Machine Drawing & Design	3.00
MECH 321	Strength and Failure in Metals	3.00
MECH 373	Instrumentation and Measurements	3.75
MECH 411	Mechanical Engineering Laboratory II	2.50
		51.75

* Offered in both day and evening.

Option Requirements

Options A, B and C

Students in options A, B, and C must complete the following courses (List I) plus two courses from one option core and a minimum of nine further elective credits. Prior to registering for courses in one of these option cores, students must indicate to the Department Chairman their choice of option. This choice is to be noted on a form available from the Department and submitted to the Chairman's office for approval *prior to March 15th.*

List I

ENGR 362	Fluid Mechanics II	3.75
ENGR 403	Engineering Economy	1.50
MECH 341	Kinematics of Mechanisms	2.50
MECH 342	Dynamics of Machines	2.50
MECH 351	Thermodynamics II	3.75
MECH 352	Heat Transfer I	3.75
MECH 441	Mechanical Engineering Design	3.00
		20.75

1. Option A—Thermo Fluid and Propulsion

ELEC 334, ENGR 471, 473, 475
MECH 421, 423, 443, 452*, 453, 461*
MECH 462*, 464, 465, 471, 481, 498

* Two of these must be chosen, plus nine additional elective credits from this list.

2. Option B—Design and Production

ELEC 334, ENGR 471, 473
INDU 323, 411, 420
MECH 412*, 421*, 423, 443, 445*
MECH 453, 463, 471, 481, 498

* Two of these must be chosen, plus nine additional elective credits from this list.

3. Option C—Automation and Control Systems

ELEC 334, ENGR 471, 472, 473*, 475
INDU 323, 420
MECH 443, 453, 463*, 471*, 481, 498

* Two of these must be chosen, plus nine additional elective credits from this list.

Option D—Industrial Engineering

Students wishing to enter this option must obtain the approval of the Department Chairman. Application forms, available from the Department must be submitted to the Chairman's office *before March 15th* of the year preceding first registration in option courses. Students in Option D must complete the following courses (List II) and six further elective credits.

List II

		Credits
ACCO C213	Financial I	3.00
COEN 311	Computer Organization and Software	3.75
EMAT 272	Advanced Probability and Statistics	3.00
INDU 310	Human Factor Engineering	3.00
INDU 313	Industrial Economics	3.00
INDU 320	Production Engineering I	3.00
INDU 321	Production Engineering II	3.00
INDU 323	Industrial Operations Research	3.00
INDU 330	Organizational Management	3.00
INDU 480	Industrial Engineering Project	3.00
INDU 481	Industrial Engineering Seminar	0.50
		31.25

Choose 6 credits from:

ELEC 334, INDU 410, 411, 420, 423
MECH 471, 498

71.70 Course Descriptions

For equivalent course numbers under the old system, please consult the 1981-82 Undergraduate Calendar. Students who have taken a given course under an old number may not repeat it for credit under an equivalent number.

Engineering Mathematics

EMAT 212 ***Calculus and Differential Equations*** (3 credits)
Prerequisite: MATH C204 (CEGEP Mathematics 105) previously or concurrently; MATH C205 (CEGEP Mathematics 203). Introduction to ordinary differential equations, with applications to engineering problems. Functions of several variables: differentiation and multiple integrals. Lectures: 3 hours per week. Tutorials: 2 hours per week.

EMAT 232 ***Matrices and Advanced Calculus*** (3 credits)
Prerequisite: EMAT 212 previously or concurrently. Review of matrix algebra; solution of systems of linear differential equations with examples drawn from physical systems; vector spaces, characteristic value problems, Cayley-Hamilton theorem with applications. Vector calculus: Gradient, Divergence, Curl, Green's Theorem. Divergence Theorem, Stokes Theorem. Lectures: 3 hours per week. Tutorials: 2 hours per week.

EMAT 252 ***Complex Variables*** (3 credits)
Prerequisite: EMAT 212; EMAT 232 previously or concurrently. Algebra of complex numbers in Cartesian and polar forms; functions and inverse functions of complex variables. Derivatives and Cauchy-Riemann, analytic and harmonic functions. Exponential, trigonometric, hyperbolic and logarithmic functions. Complex line integrals, Cauchy-Goursat theorem, Cauchy integral formula. Taylor's and Laurent's series. Residue theorem and applications. Lectures: 3 hours per week.

EMAT 271 ***Applied Probability and Statistics*** (3 credits)
Prerequisite: MATH C205 (CEGEP Mathematics 203). Elementary probability theory. Binomial, normal and Poisson distribution. Sampling and decision theory. Curve fitting. Correlation theory. Applications to the analysis of experimental results. Factorial plans. Lectures: 3 hours per week.
NOTE See §200.7

EMAT 272 ***Advanced Probability and Statistics*** (3 credits)
Prerequisite: EMAT 271. Time series analysis, regression and correlation analysis, forecasting and smoothing techniques. Extreme value statistics, Monte Carlo simulation, reliability analysis. Applications to general engineering and industrial engineering problems. Lectures: 3 hours per week.

EMAT 311 ***Transform Calculus and Partial Differential Equations*** (3 credits)
Prerequisite: EMAT 232. Elements of complex variables. The Laplace transform: Laplace transforms and their properties, solution of linear differential equations with constant coefficients. Further theorems and their applications. The Fourier transform: orthogonal functions, expansion of a function in orthogonal functions, the Fourier series, the Fourier integral, the Fourier transform, the convolution theorem. Partial differential equations: physical foundations of partial differential equations, introduction to boundary value problems. Lectures: 3 hours per week.

EMAT 312 ***Laplace Transforms and Advanced Differential Equations*** (3 credits)
Prerequisite: EMAT 232; EMAT 252. The Laplace Transform, its inverse and properties. Laplace Transform of periodic functions. Applications to solution of linear differential equations with constant coefficients. Orthogonal functions, Fourier series, Fourier Transform. The convolution theorem. Properties of special functions (e.g. Bessel, Legendre). Partial differential equations and introduction to boundary value problems. The Sturm Liouville problem. Lectures: 3 hours per week.

EMAT 391 ***Numerical Methods in Engineering*** (3 credits)
Prerequisite: COMP C211 or 212; EMAT 232. Roots of algebraic and transcendental equations; function approximation; numerical differentation; numerical integration; solution of simultaneous algebraic equations; numerical integration of ordinary differential equations. Lectures: 3 hours per week. Tutorials: 1 hour per week.

Engineering and Computer Science

ENCS 245 ***Introduction to Mechanical Analysis*** (3 credits)
Prerequisite: PHYS C204 and C224 (CEGEP Physics 101); EMAT 212 previously or concurrently.

principle of virtual work, free loading diagrams. Kinetics of particles and rigid bodies. Kinematics of mechanical systems. Dynamics of machines: static and dynamic analysis of space mechanisms, generalized coordinates, Euler's and Lagrange's equations of motion. Lectures: 3 hours per week. Tutorial: 1 hour per week.

ENCS 281 ***Technical Writing*** (2 credits)
Technical writing form and style. Technical and scientific papers, abstracts, reports. Library research and referencing methods. Business communication. Lectures: 2 hours per week.

ENCS 454 ***Introduction to VLSI*** (3 credits)
Prerequisite: COMP 325 or COEN 414. Review of IC development and realization of logic elements. CMOS inverter, logic levels, power and speed considerations, area of implementation. Electrical analysis using SPICE, input, output, delay time and loading. CMOS NAND/NOR gates, fan-out limitations and layout considerations. Simple CMOS process, design rules and layout exercises. CMOS logic system design and analysis using SPLICE. Logic simulation and testing specification of input, output and delay for fault simulation. Other CAD facilities for logic simulation and testing. Gate arrays and semicustom CMOS design considerations. CMOS dynamic VLSI circuits; CMOS memories. NMOS dynamic and static circuit design: NMOS memories. Hierarchical approach to digital design of VLSI circuits. Lectures: 3 hours per week.

ENCS 455 ***Introduction to VLSI Architecture*** (3 credits)
Prerequisite: COMP 325 or COEN 414; COMP 326 or COEN 416. Introduction to VLSI technology. Synchronous system design. Computational structures and algorithms. Applications of VLSI to problem solving. Lectures: 3 hours per week.

ENCS 471 ***Robotics*** (3 credits)
Prerequisite: COMP 224 and COMP 285, or COEN 411; COMP 352; ENCS 245. Robot perception. Task planning. Kinematics. algorithmic aspects. Lectures: 3 hours per week.

Engineering

ENGR 212 ***Technical Drawing*** (2 credits)
Lettering, instruments, drawing practices; orthographic projections; pictorial views; isometric views, perspectives, sectional views, auxiliary views; dimensioning practices; working drawings: standard components, drawings of steel and concrete structures, mechanical and piping drawings, electrical and architectural drawings. Lectures: 2 hours per week. Tutorials: 2 hours per week.

ENGR 213 ***Descriptive Geometry*** (2 credits)
Prerequisite: ENGR 212. Spatial relationships of points, lines, planes, and solids. Application to pictorial representation of three-dimensional objects, intersections of planes and solids, developments, mapping and topographical problems. Lectures: 2 hours per week. Tutorial: 2 hours per week.

ENGR 242 ***Statics*** (3 credits)
Prerequisite: EMAT 212 previously or concurrently; PHYS C204 and C224 (CEGEP Physics 101); MATH C204 (CEGEP Mathematics 105). Resultant of force systems; equilibrium of particles and rigid bodies; distributed forces; statically determinate systems; trusses; friction; moments of inertia; virtual work. Shear and bending moment diagrams. Lectures: 3 hours per week. Tutorial: 1 hour per week.

ENGR 243 ***Dynamics*** (3 credits)
Prerequisite: EMAT 212; ENGR 242. Kinematics of a particle and rigid body; forces and accelerations; work and energy; impulse and momentum; dynamics of a system of particles and rigid bodies, introduction to vibrations. Lectures: 3 hours per week. Tutorial: 1 hour per week.

ENGR 244 ***Mechanics of Materials*** (3.75 credits)
Prerequisite: ENGR 242; EMAT 232 previously or concurrently. Mechanical behaviour of materials; stress; strain; shear and bending moment diagrams; introduction to inelastic action. Analysis and design of structural and machine elements subjected to axial, torsional and flexural loadings. Combined stresses and stress transformation. Deflections. Introduction to elastic stability. Lectures: 3 hours per week. Tutorial: 1 hour per week. Laboratory: 3 hours per week, alternate weeks.

ENGR 251 ***Thermodynamics I*** (3 credits)
Prerequisite: MATH C203 (CEGEP Mathematics 103). Basic principles of thermodynamics and their application to various systems composed of pure substances and their homogeneous non-reactive mixtures. Simple power production and utilization cycles. Lectures: 3 hours per week. Tutorial: 1 hour per week.

ENGR 273 ***Basic Circuit Analysis*** (3.75 credits)
Prerequisite: EMAT 212, previously or concurrently; PHYS C205 and C225 (CEGEP Physics 201). Current, voltage, power and energy; instantaneous, average, and RMS values. Resistors. Ohm's law. Dependent and independent sources. Kirchoff's laws, mesh and modal analysis. Network theorems: super position, reciprocity, Thevenin, Norton, maximum power transfer. Inductors and capacitors. Step response of simple RC, RL and RLC circuits. Sinusoidal steady-state response of simple RLC circuits. Phasors, power, impedance, resonance. Lectures: 3 hours per week. Tutorial: 1 hour per week. Laboratory: 3 hours per week, alternate weeks.

ENGR 274 ***Physical Systems and Measurements*** (3.75 credits)
Prerequisite: ENGR 273. Representations of idealized linear lumped mechanical, fluid and thermal systems in terms of electrical circuits. Singularity functions, system response to singularity functions as input. The Laplace transform as a method of solving system equations. The representation of circuit elements and initial conditions in the transform domain. Generalized impedance and system functions; properties of linear systems; frequency response. Coupled coils and transformers. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ENGR 342 ***Structural Analysis I*** (2 credits)
Prerequisite: ENGR 244 previously or concurrently. Analysis of statically determinate structures: deflections, strain energy concepts, virtual work principles. Mueller Breslau principle, influence lines. Approximate methods for statically indeterminate structures. Collapse load analysis. Computer applications. Lectures: 2 hours per week. Tutorial: 1 hour per week.

ENGR 343 ***Structural Analysis II*** (3 credits)
Prerequisite: ENGR 342. Analysis of statically indeterminate structures: the methods of consistent deformations, slope deflection, and moment distribution. Application of virtual work principles. Introduction to matrix methods. Computer applications. Lectures: 2 hours per week. Laboratory: 2 hours per week.

ENGR 344 ***Structural Design I*** (3 credits)
Prerequisite: ENGR 342 previously or concurrently. Basis for limit states design. Code requirements. Structural steel design: tension and compression members, beams and beam-columns. connections. Introduction to the design of timber members. Lectures: 2 hours per week. Laboratory: 2 hours per week.

ENGR 345 ***Structural Design II*** (3 credits)
Prerequisite: ENGR 342 previously or concurrently. Reinforced concrete behaviour in flexure, compression, shear and bond. Ultimate strength design of reinforced concrete beams, columns, walls and footings. Introduction to prestressed concrete and masonry. Lecture: 2 hours per week. Laboratory: 2 hours per week.

ENGR 361 ***Fluid Mechanics I*** (3 credits)
Prerequisite: EMAT 212; EMAT 232; ENGR 251. Fluid properties and flow characteristics; fluid statics, basic laws for systems and control volumes, conservation of mass, linear-momentum equations, first law of thermodynamics, Bernouli equation, kinematics of flow, dynamics of flow, dimensional analysis and similitude, characteristics of real fluid flow, resistance to flow, flow measurement. Lectures: 3 hours per week. Tutorial: 1 hour per week.

ENGR 362 ***Fluid Mechanics II*** (3.75 credits)
Prerequisite: ENGR 361. Incompressible viscous flow, steady closed conduit flow, fluid resistance and boundary layer effects, differential equations for open channel flow, specific energy, gravity waves, hydraulic jump. Fluid machinery. Selected experiments in incompressible flow and in open channel flow. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ENGR 372 ***Fundamentals of Control Systems*** (3.75 credits)
Prerequisite: EMAT 311 or 312; ENGR 274. Mathematical models of control systems. Characteristics, performance and stability of linear feedback control systems. Root-locus methods. Frequency response methods. Stability in the frequency domain. Design and compensation of feedback control systems. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ENGR 402 ***Engineering Law*** (1.5 credits)
Different branches of law; engineering registration; negligence; law vs. ethics; contracts; labour organizations and legislation; workmen's compensation act. Lectures: 1½ hours per week.

ENGR 403 ***Engineering Economy*** (1.5 credits)
Economy studies for decision making, annual cost, present worth, capitalized cost, rate of return. Depreciation and the capital recovery period. Sources of funds and cost of capital. Incremental and sunk costs. Economy studies for retirement or replacement. Influence of income taxes on economy studies. Lectures: 1½ hours per week.

ENGR 410 ***Technical Report*** (1.5 credits)
Prerequisite: ENCS 281. Students in the B.Eng. programme must submit a technical report on entering their final year. The report must be from 2,000 to 5,000 words long, on a topic closely related to the student's option. The report must present a review of a current engineering problem or current engineering practice; a student's summer work may provide a suitable basis. Students are responsible for acquiring a set of complete instructions and the document *Form and Style* in the spring before entering the final year of the B.Eng. programme. These documents are available from the Office of the Assistant Dean, Student Affairs.
N.B. The topic must be approved by the student's department no later than the last Monday in June. The report must be submitted no later than 5:00 p.m. on the third Monday after Fall classes begin.

ENGR 451 ***Construction Engineering*** (3 credits)
Prerequisite: BLDG 341 or CIVI 341. The nature of construction and the environment in which the industry works; contractor objective; construction practices and processes; construction specifications; organizational structures for project delivery; rudimentary decision analysis; planning,

scheduling and control of men, money, machines, materials and methods to control time, cost and content. Lectures: 3 hours per week.

ENGR 452 ***Matrix Analysis of Structures*** (3 credits)
Prerequisite: EMAT 232; ENGR 343. Classical and matrix methods of structural analysis; influence coefficients, transformation matrices. Matrix formulation of the force and of the displacement methods of analysis. Direct stiffness approach; sub-structure technique. Introduction to finite-element method. Computer applications. Lectures: 3 hours per week.

ENGR 455 ***Introduction to Structural Dynamics*** (3 credits)
Prerequisite: EMAT 391, ENGR 243, ENGR 342. Theory of vibration. Dynamic response of simple structural systems. Effects of blast, wind, traffic and machinery vibrations. Basic concepts in earthquake resistant design. Computer applications. Lectures: 3 hours per week.

ENGR 471 ***Time Domain Analysis and Design*** (4 credits)
Prerequisite: ENGR 372. State space analysis and design of continuous and discrete systems. Controllability and observability, modal control, pole placement techniques, Luenberger observers, Liapunov stability. Lectures: 4 hours per week.

ENGR 472 ***System Optimization*** (3.75 credits)
Prerequisite: EMAT 391. Linear least squares. Properties of quadratic functions with applications to steepest descent method, Newton's method and Quasi-Newton methods for nonlinear optimization. One dimensional optimization. Introduction to constrained optimization, including the elements of Kuhn-Tucker conditions for optimality. Least p^{th} and mini-max optimization. Application of optimization techniques to engineering problems. Lectures: 3 hours per week. Laboratory: 3 hours alternate weeks.

ENGR 473 ***Control System Design*** (3.75 credits)
Prerequisite: ENGR 372. A course in industrial control design procedures by case study, including practical sensing, control, and actuating elements; optimization of system performance by choice of components and compensation; nonlinearites, introduction to multi-loop systems. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ENGR 475 ***Process Dynamics and Control*** (3.75 credits)
Prerequisite: ENGR 372. Dynamics of mechanical and chemical processes; system capacity; resistance; piping complexes; characteristics and dynamics of control valves; process time constants; proportional, reset and derivative control actions; feedforward and cascade control; direct digital control. Case studies on liquid-level control, temperature and heat exchanger control. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

Social Aspects of Engineering

ENGR 491 ***Engineers and Society*** (3 credits)
Prerequisite: ENCS 281; 20 courses in BEng programme. Sociological analysis of the interaction between the engineering profession and society, the development of the profession, growth of technical societies, trends in engineering and engineering technology education, relationship to other professions. Role of engineers in Canadian industry, government and industrial research. Lectures: 3 hours per week.

ENGR 492 ***Historical Impact of Technology on Society*** (3 credits)
Prerequisite: ENCS 281; 20 courses in BEng programme. Social history of technology and of science including ancient and medieval periods, industrial revolution and modern times. Engineering and scientific creativity, social and environmental problems created by uncontrolled technology, appropriate technology. Lectures: 3 hours per week.

ENGR 493 ***Engineering, Resources and Environment*** (3 credits)
Prerequisite: ENCS 281; 20 courses in BEng programme. Sources, consequences and control of air, water, noise, solid and radiation pollution. Management of mineral and energy resources. Conservation of resources through engineering efficiency, recycling and communal practices. Renewable resources. Case studies of engineering projects. Lectures: 3 hours per week.

ENGR 494 ***Effect of Technology on the Person*** (3 credits)
Prerequisite: ENCS 281; 20 courses in BEng programme. Psychological effects of various technologies. Changes in personal, family and community values arising from various patterns of industrial development. Enhancement of personal development by technology, adaptation of the machine to man; the organization man. Lectures: 3 hours per week.

ENGR 495 ***Technology Assessment and Control*** (3 credits)
Prerequisite: ENCS 281; 20 courses in BEng programme. The organization of mechanisms and institutions to control and mediate the unwanted and unanticipated side-effects of contemporary technology. Environmental impact assessment, analysis of industrial health and safety, risk analysis. Technological forecasting, future studies, appropriate technology, the conserver society. Relationships of technology assessment to science policy, resource planning and energy strategy. Lectures: 3 hours per week.

ENGR 496 ***Science Policy and Engineering Innovation*** (3 credits)
Prerequisite: ENCS 281; 20 courses in BEng programme. An analysis of the basic concepts in science and technology policy including the allocation of resources; research and development; invention, innovation and diffusion. The social impact of policy decisions and the structure and programmes of government organizations involved in the field. Of particular concern will be issues such as foreign ownership, science and technology development within a regional context, and the role of government, industry and the universities within a balanced science and technology policy. Lectures: 3 hours per week.

ENGR 497 ***The Management of Transition to an Information Society*** (3 credits)
Prerequisite: ENCS 281; 20 courses in BEng programme. Understanding the social role of the new technologies of the information machine, the emerging information society, the rate of adoption of new technologies, the implications of the information machines for global societies. The effects of the new technology on the structure of decision-making process. Lectures: 3 hours per week.

Building Engineering

BLDG 341 ***Building Engineering Systems*** (3 credits)
Prerequisite: COMP C211 or 212; EMAT 232, previously or concurrently. Introduction to systematic solution of building engineering problems. Techniques treated include linear programming, network analysis, nonlinear programming, geometric programming and an introduction to decision analysis and simulation. Techniques illustrated by application to problems in building science, building environment, building structures and construction management. Lectures: 3 hours per week.

BLDG 363 ***Building Science I*** (4 credits)
Prerequisite: ENGR 243. General introduction to the aural and visual environment. Subjective and objective scales of measurement. Laws of psychophysics. Introduction to vibration. The hearing mechanism. Transfer of sound. Passive control of noise in buildings, transmission loss. Absorption and reverberation time. Active control of the aural environment. Visual perception. Photometry, brightness, luminance and illumination. Natural lighting of buildings. Artificial lighting. Colorimetry. Lectures: 3 hours per week. Tutorial: 1 hour per week. Laboratory: 2 hours per week.
NOTE: Students having credit for BLDG C362 may not take this course for credit.

BLDG 364 ***Building Science II*** (4 credits)
Prerequisite: ENGR 251; ENGR 362 previously or concurrently. General introduction to the thermal environment. Topics include: heat, temperature, thermal storage, conduction: steady state and transient processes. Convection: Natural and forced. Radiation. Combined radiative and convective surface transfer. Psychrometrics. Thermal comfort. Air quality and standards. Condensation: Surface and interstitial. Wind and snow effects. Lectures: 3 hours per week. Tutorial: 1 hour per week. Laboratory: 2 hours per week.
NOTE: Students having credit for BLDG C361 may not take this course for credit.

BLDG 371 ***Building Service Systems*** (3 credits)
Prerequisite: BLDG 364. Principles of building service systems, including electrical, gas, communications, service water supply and distribution; introduction to codes and standards for utility distribution systems. Lectures: 2 hours per week. Laboratory: 2 hours per week.

BLDG 401 ***Building Economics*** (3 credits)
Prerequisite: BLDG 341. Development of economic performance measures of interest to developers, owners, contractors and users. Sources of finance and the determinants of the cost of money. Treatment of life cycle costing, economic risk; tax regulation, inflation, forecasting techniques; model building, cost indices, elemental estimating, computerized information systems. Consideration of economic analyses of projects, single buildings and building components. Lectures: 3 hours per week.

BLDG 459 ***Computer Aided Building Design*** (3 credits)
Prerequisite: BLDG 341; BLDG 401 previously or concurrently. Identification of objectives, decision variables, processes and information flow in building design. Applications and evaluation of computer systems to components of building design process. Determination of decision variables in problem modelling and sensitivity of results. Current applications in structural analysis and design, space layout, electrical distribution systems, HVAC design, lighting design, estimating, specification editing and scheduling. Evaluation of issues of interdisciplinary information control and interchange. Lectures: 3 hours per week.

BLDG 461 ***Building Enclosure Design*** (3 credits)
Prerequisite: BLDG 363; BLDG 364; CIVI 321. Technical influences on the design of building exteriors including the control of heat flow, air and moisture penetration, building movements and deterioration. Special emphasis is given to the principle of rain screen walls and to energy conserving designs. Analytical techniques and building codes are discussed through case studies and design projects. Lectures: 3 hours per week.

BLDG 462 ***Modern Building Materials*** (3 credits)
Prerequisite: CIVI 321. Engineering properties of building materials such as: plastics, synthetic

fibres, adhesives, sealants, caulking compounds, foams, sandwich panels, composites, polymer-concrete systems, fiber-reinforced concretes, plastic mortars, polymers for flooring, roofing, synthetic wall papers. Their structural, thermal and acoustical properties. Consideration of corrosion, bio- and thermal-degradation, stability to ultraviolet and solar radiation. Laboratory sessions to illustrate synthesis, application, testing, deterioration and protection. Lectures: 3 hours per week.

BLDG 465 ***Fire and Smoke Control in Buildings*** (3 credits)
Prerequisite: BLDG 363; BLDG 364. Topics treated include: fire and smoke control; failure mechanisms of building enclosure, illustrated by case studies; code requirements for enclosure systems; systems approach for fire safety. Lectures: 3 hours per week.

BLDG 471 ***HVAC System Design*** (3 credits)
Prerequisite: BLDG 371, BLDG 476 previously or concurrently. Principles of HVAC system design and analysis, including component and system selection criteria, control systems and techniques; operational economics; computer applications for thermal load analysis. Lectures: 2 hours per week. Laboratory: 2 hours per week.

BLDG 472 ***Building Energy Conservation Technologies*** (3 credits)
Prerequisite: BLDG 471 previously or concurrently. Identification of the optimal energy performance achievable with various types of buildings and service systems.
Reduction of infiltration. Control systems and strategies to achieve optimal energy performance. Low energy heat rejection and recuperation systems. Effective utilization of daylight, heat pumps, passive and active solar heaters, heat storage, heat pipes and thermosyphons in new and old buildings. Lectures: 3 hours per week.

BLDG 473 ***Building Acoustics*** (3 credits)
Prerequisite: BLDG 363. Noise control criteria and regulations, instrumentation, noise sources, room acoustics, walls, barriers and enclosures, acoustical materials and structures, vibration and noise control systems for buildings. Lectures: 3 hours per week.

BLDG 474 ***Building Illumination*** (3 credits)
Prerequisite: BLDG 363. Production, measurement and control of light, design of lighting systems. Design in respect to daylighting. Integration of lighting systems with mechanical systems. Lectures: 3 hours per week.

BLDG 476 ***Heat Transfer in Buildings*** (3 credits)
Prerequisite: BLDG 364. Two and three dimensional steady state and transient conductive heat transfer together with convection and radiation as applied to building materials and geometrics. The course will also include electrical analogies, iterative techniques, effects of moisture, and introduction to heat exchangers. Lectures: 3 hours per week.

BLDG 481 ***Architectural Appreciation and Design*** (3 credits)
Prerequisite: 20 courses in the BEng programme. Historical and modern architectural theories. Meaning, intentions and formal issues in contemporary design. The influence of technology, energy conservation and environmental constraints on built form. Architecture vs. industrial design. Lectures: 3 hours per week.

BLDG 491 ***Labour and Industrial Relations in Construction*** (3 credits)
Prerequisite: ENGR 451. The study of labour legislation with special emphasis on the construction industry, union organization, the theory and practice of negotiations, mediation, contract administration and arbitration. Review of actual contracts, discussion of future trends. Lectures: 3 hours per week.

BLDG 492 ***Construction Methods*** (3 credits)
Prerequisite: ENGR 451. Construction methods, sequences and material handling techniques; impact of safety considerations; work method studies; equipment policy, selection and replacement analysis. Lectures: 3 hours per week.

BLDG 493 ***Legal Issues in Construction*** (3 credits)
Prerequisite: ENGR 451. Legal concepts and processes applicable to the development of constructed facilities and to the operation of the construction firm. Emphasis on Quebec law and institutions. Lectures: 3 hours per week.

Civil Engineering

CIVI 231 ***Geology*** (2.75 credits)
Basic principles of physical and structural geology, with emphasis on topics related to Civil Engineering, study of minerals, rocks and soil types, load formation, techniques of air photo interpretations and geological maps. Lectures: 2 hours per week. Laboratory: 3 hours per week, alternate weeks.

CIVI 271 ***Surveying*** (3 credits)
Elementary operations employed in engineering surveying; use, care and adjustment of instruments;

linear and angular measurements; traversing; earthwork calculations; theory of errors; horizontal and vertical curves and curve layout; slope stakes and grades, application of surveying methods to city, and topographic surveying and introduction to advanced surveying techniques; use of digital computers in surveying calculations.
Summer school taken before entering second year of study in the B.Eng. programme. Lectures and Field Work: 8 hours per day; 6 days per week for 3 weeks.

CIVI 321 ***Engineering Materials*** (3.75 credits)
Linear and non-linear material behaviour, time-dependent behaviour; structural and engineering properties of structural metals; behaviour of wood; production and properties of concrete; bituminous materials, ceramics, plastics; introduction to composite materials. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

CIVI 341 ***Civil Engineering Systems*** (3 credits)
Prerequisite: Registration in second year in Civil Engineering programme; EMAT 271; COMP 211 (CEGEP Data Processing 911) or 212. Development of concepts and techniques commonly associated with systems engineering which are applicable to design and operation of systems that concern Civil Engineers. Problem formulation, optimization, linear programming, sequencing, routing and scheduling, mathematical expectation, random models and queues. The techniques developed are used to solve problems in transportation, water resources, structures and construction management. Lectures: 3 hours per week.

CIVI 372 ***Transportation Engineering*** (3 credits)
Prerequisite: CIVI 341. Social and economic importance of transportation. Essential elements of transportation systems and characteristics of different modes of transportation. Fundamentals of individual vehicle motion and traffic flow. Transportation demand and planning process. Transportation network flows. Introduction to location and design of system components. Lectures: 3 hours per week.

CIVI 381 ***Water Resources Engineering*** (3.5 credits)
Prerequisite: ENGR 362, previously or concurrently; EMAT 271. Open channel hydraulics; critical flow, uniform and non-uniform flows; design of erodible and non-erodible channels; flow profile, classification and computation. Practical problems. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 431 ***Soil Mechanics*** (3.75 credits)
Prerequisite: CIVI 321 and completion of 20 courses. Index properties and classification of soils. Weight-volume relationships. Soil structures. Moisture-density relationships. Permeability, deformation and strength of soils. Principle of total and effective stresses. Steady stage seepage through isotropic soil media. Stress distribution due to external loads and analysis of total settlements. Outline of theory of consolidation. Fundamentals of stability of earth retaining walls, slopes and footings. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

CIVI 434 ***Geotechnical Analysis*** (3 credits)
Prerequisite: EMAT 391. Seepage through anisotropic soils. Linear and nonlinear consolidation theories. Sand drains. Introduction to soil dynamics and rock mechanics; wave propagation in soils and rock; machine foundations. Stress concentration around tunnels opened in rock. Pressure distribution on buried structures. Introduction to numerical techniques as applied to solution of geotechnical problems. Lectures: 3 hours per week.

CIVI 435 ***Foundation Design*** (3.5 credits)
Prerequisite: ENGR 343; CIVI 431. Loads, bearing capacity and settlement. Lateral pressures. Foundation drainage and water-proofing. Spread footings. Strip footings. Pile foundations. Caissons. Retaining walls. Sheet piling walls. Braced cofferdams. Cellular cofferdams. Anchors. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 436 ***Mechanics of Geotechnical Materials*** (3 credits)
Prerequisite: CIVI 431. Mechanics of ideal geotechnical materials: elastic, viscoelastic, and plastic; behaviour of soils, permafrost, rocks and ice. Mechanical properties of sensitive clays, muskeg, expansive and collapsible soils. Processed geotechnical materials used in earth embankments, pavements and base courses, hydraulic fills and tailings. Improvement techniques: chemical and mechanical. Quality control of processed materials. Lectures: 3 hours per week.

CIVI 441 ***Civil Engineering Systems Analysis*** (3 credits)
Prerequisite: CIVI 341. Approaches to formulation and problem structure, evaluation criteria, applications of optimization, probability and decision theory to the solution of Civil Engineering problems. Mini projects. Lectures: 2 hours. Laboratory: 2 hours.

CIVI 451 ***Advanced Structural Analysis*** (3.5 credits)
Prerequisite: ENGR 343. Analysis of frames, arches and cable structures; shear centre; unsymmetrical bending; bending of curved bars; introduction to matrix methods; influence lines for statically indeterminate structures; plastic analysis; computer applications. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 453 ***Design of Reinforced Concrete Structures*** (3.5 credits)
Prerequisite: ENGR 343; 345. Design of long columns, columns subjected to biaxial bending, two-way slabs, flat plates, girders and shells. Design of frames, shear-walls, and prefabricated structures. Prestressed concrete: losses, short and long term deflections; design requirements for shear, flexure, bond, and anchorage. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 454 ***Design of Steel Structures*** (3.5 credits)
Prerequisite: ENGR 343; 344. Trends and developments in structural steel design. Framing systems. Floor systems; composite construction; plate girders. Design of braced frames, moment resisting frames. Connections. P-Delta effects. Introduction to steel bridge design. Lectures: 2 hours per week Laboratory: 3 hours per week.

CIVI 461 ***Continuum Mechanics*** (3 credits)
Prerequisite: ENGR 244; ENGR 361. A unified approach to solution of problems involving continuous domains. Transformation of coordinates, tensors, state of stress, rotation and deformation, conservation of mass, momentum, moment of momentum and energy theorems, constitutive laws, application to problems of fluid mechanics, elasticity and plasticity. Lectures: 3 hours per week.

CIVI 471 ***Highway Design*** (4.5 credits)
Prerequisite: CIVI 271; 372. Design controls and criteria including traffic and highway characteristics and capacity. Location and right-of-way. Earthworks. Geometric design of highways and terminals. Pavement design. Highway design project. Lectures: 3 hours per week. Laboratory: 3 hours per week.

CIVI 472 ***Traffic Engineering*** (3 credits)
Prerequisite: EMAT 271, CIVI 341; CIVI 372. The vehicle, driver, and roadway system, traffic surveys, and volume studies, traffic flow theory, highway capacity and level of service for freeways, rural highways and urban streets, accident studies, network analysis, traffic control devices, traffic control measures, and highway safety. Lectures: 3 hours per week.

CIVI 474 ***Urban Transportation Planning*** (3 credits)
Prerequisite: CIVI 341; CIVI 372. The systems approach to transportation planning process, supply and demand functions, travel forecasting models, land-use models, urban data collection and analysis, impact on the environment, evaluation of alternative transportation systems, future transportation technology. Lectures: 3 hours per week.

CIVI 481 ***Water Supply Systems*** (3.5 credits)
Prerequisite: CIVI 381. Water use cycle; capacity of water supply systems; sources of raw water; development of surface water and ground water; water quantities and requirements; design of distribution systems; storage; pumping; water quality; introduction to water purification practices. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 482 ***Urban Sanitation*** (3.5 credits)
Prerequisite: CIVI 381. Characteristics and quantities of domestic wastewaters. Urban hydrology and drainage. Design of sewers. Introduction to physical and biological wastewater treatment practices. Disposal of wastes. Stream pollution and control. Computer simulations. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 483 ***Hydrology*** (3.5 credits)
Prerequisite: CIVI 381. Weather elements. Hydrologic cycle. Hydrographs. Runoff-rainfall relations. Flood routing and control. Stochastic process applications. Urban storm drainage. Ground water hydrology. Numerical modelling approaches. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 484 ***Hydraulic Engineering*** (3.5 credits)
Prerequisite: CIVI 381. Outlet works for reservoirs. Elements of river and channel engineering. Water resource system design and project economics. Application of numerical, probabilistic and graphical optimization techniques to systems design. Computer applications. Lectures: 2 hours per week. Laboratory: 3 hours per week.

CIVI 485 ***Hydraulic Structures*** (3.5 credits)
Prerequisite: CIVI 431; CIVI 483 previously or concurrently. Analysis of slopes, earth dams, gravity dams, arch dams, spillways, outlet works and marine structures. Lectures: 2 hours per week. Laboratory: 3 hours per week.

Computer Engineering

COEN 231 ***Introduction to Discrete Mathematics*** (3 credits)
Prerequisite: MATH C204 or CEGEP Mathematics 105. Sets and binary relations. Algebraic structures including binary operations, semigroups, groups, rings and morphisms. Lattices including posets and distributive lattices. Graphs. Boolean algebras including lattice representation of Boolean algebras and canonical expressions. Lectures: 3 hours per week. Tutorial: 1 hour per week.
NOTE: Students having completed COMP 231 may not take this course for credit.

COEN 311 ***Computer Organization & Software*** (3.75 credits)
Prerequisite: COMP C211 (CEGEP Data Processing 911) or 212 or 244. Number systems and codes. Logical basis of computer structure; machine organization and functional units; machine programming including subroutines, linkages, macros and assembly systems; compilers and operating systems. Difference between mainframe, mini and microcomputer systems. Lectures: 3 hours per week. Laboratory: 1½ hours per week.

COEN 412 ***Digital Electronics*** (3.75 credits)
Prerequisite: ELEC 311; COEN 413 previously or concurrently. Modelling of semiconductor devices in non-linear regions. Logic families. Switching speeds. Fan-in and fan-out. Multivibrators, flip-flops, memories charge-coupled devices, and bubble memories. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

COEN 413 ***Digital Systems Design*** (3.75 credits)
Prerequisite: ELEC 311; COEN 231 or COMP 231. Multiple output circuits. Designing with MSI and LSI. Decoders, multiplexers, adders, PLA's. Introduction to sequential circuits; flip-flops. Completely specified sequential machines. Machine equivalence and minimization. Implementation of clock mode sequential circuits. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

COEN 414 ***Sequential Circuits*** (3.75 credits)
Prerequisite: COEN 413. Review of completely specified sequential machines. State assignment and machine partitioning. Incompletely specified sequential machines; machine inclusion; machine compatibility; final class machines. Pulse mode sequential circuits. Level mode sequential circuits. Critical races and state assignment. Delays and hazards. Computer-aided design and simulation of digital circuits. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

COEN 416 ***Design of Digital Computers*** (3 credits)
Prerequisite: COEN 311; COEN 414. Computer memories, registers and data-path. Register-transfer-level description of digital systems. Design of control and arithmetic units. Inter-system communication, input/output, design of interfaces. Parallelism in computer systems for increased speed of operation. Special computers such as microprocessors. Lectures: 3 hours per week.

COEN 417 ***Microprocessor Systems*** (4.5 credits)
Prerequisite: COEN 311 and COEN 413. Basic microprocessor systems, architecture, CPU memory, I/O, buses. Review of Intel 8085. Memory components; RAM, ROM, EPROM, EEPROM. Dynamic bus structure. Synchronous/asynchronous, multiplexed/non-multiplexed buses. Address decoding, ECC, dual-ported memories. Serial and parallel I/O. Synchronous and asynchronous communications, RS232. Parallel ports and USARTS. Exception processing, interrupt controllers. A/D and D/A converters. Direct memory access, bus arbitration protocol. Microprocessor software requirements. Lectures: 3 hours per week. Laboratory: 3 hours per week.

COEN 418 ***Advanced Concepts in Microcomputer Systems Architecture and Design*** (4.5 credits)
Prerequisite: COEN 417 and COMP 343. 16-bit and 32-bit microprocessor families, their architecture and instruction sets. Numerical processors, I/O processors, memory management. Introduction to IRMX-86. Real time operating system. Processor and memory management mechanisms; IRMX-86 extension objects. Silicon operating systems. Floppy and Winchester disks. Lectures: 3 hours per week. Laboratory: 3 hours per week.

COEN 431 ***Software Engineering*** (3 credits)
Prerequisite: COMP 343. Software life cycle, software requirements and requirement documentation. Software design: top-down and bottom-up approaches; design validation, and design reviews. Software implementation, choice of a programming language, and portability. Testing, debugging and verification. Design of test cases. Software documentation and its maintenance. Documentation tools and documentation portability, user interface design. Lectures: 3 hours per week.
NOTE: Students having completed COMP 354 may not take this course for credit.

COEN 481 ***Computer Engineering Project*** (4 credits)
Prerequisite: Registration in final year. The Computer Engineering project provides an opportunity for each student to carry out a design project associated with one or more of the specialist elective courses, under the supervision of a faculty member. The nature of the project selected should be such as to require independent study of current technical literature. When feasible the designs will be assessed in the laboratory. Each student is to present a complete report at the end of the project. Equivalent laboratory time: 6 hours per week.

COEN 498 ***Topics in Computer Engineering*** (3 credits)
Prerequisite: COEN 413; COMP 343. The course, when offered, will include topics which complement elective courses in computer engineering and computer science. Lectures: 3 hours per week.

Electrical Engineering

ELEC 251 ***Fundamentals of Electromagnetics*** (3 credits)
Prerequisite: ENGR 273; EMAT 232 previously or concurrently. Electric charge, Coulomb's Law, electrostatic forces, electric field, Gauss' Law, electric potential, stored energy. Dielectrics,

properties of materials in electric fields. Electric current, conduction in a vacuum and in material media, displacement current, magnetic field of a current, force on a current-carrying wire, magnetic induction, electromotive force, energy stored in a magnetic field. Magnetism in material media, magnetic circuits. Time varying fields. Capacitance, resistance, inductance, elements of electric circuits. Lectures: 3 hours per week. Tutorial: 1 hour per week.

ELEC 311 ***Electronics I*** (4.5 credits)
Prerequisite: ENGR 274. Semiconductor diodes, rectifiers, and wave form-shaping circuits. Zener, varactor and tunnel diodes. Voltage and current amplifiers. Characteristics and operation of field-effect and bipolar transistors. Biasing techniques and thermal runaway. Field-effect and bipolar transistor amplifiers. Lectures: 3 hours per week. Laboratory: 3 hours per week.

ELEC 312 ***Electronics II*** (4.5 credits)
Prerequisite: ELEC 311; ELEC 341. Multistage transistor amplifiers. Small-signal analysis. Differential and power amplifiers. Operational amplifiers and their applications. High-frequency modeling of transistors. Frequency response of amplifiers. Oscillator circuits. Lectures: 3 hours per week. Laboratory: 3 hours per week.

ELEC 318 ***Industrial Electronics*** (3.75 credits)
Prerequisite: ENGR 274. A survey of electronic components and systems used in industry. Analog devices; the transistor; the operational amplifier and their models. Amplifiers. Digital devices: gates, logic devices. Large scale integrated circuits, microcomputers. Lectures: 3 hours per week. Laboratory: 3 hours per week; alternate weeks.
NOTE: Electrical Engineers may not take this course for credit.

ELEC 321 ***Electrical Properties of Materials*** (3 credits)
Prerequisite: ELEC 251. Structure of crystals. Electrical, magnetic, dielectric and optical characteristics and their measurements. Energy levels, localized states, and transport properties of solids. Recent device applications of metals, semi-metals, semiconductors, semi-insulators and insulators. Lectures: 3 hours per week.

ELEC 331 ***Electromechanics*** (4.5 credits)
Prerequisite: ELEC 251; ENGR 274 previously or concurrently. Three-phase circuits. Power transformers. Energy in singly and doubly excited systems; principles of electromechanical energy conversion. Basic features and models of d.c. machines, 3-phase induction machines, 3-phase synchronous machines. Lectures: 3 hours per week. Laboratory: 3 hours per week.

ELEC 333 ***Electric Machines*** (3.75 credits)
Prerequisite: ELEC 331. Air gap field distribution, windings, harmonic content of induced voltages in rotating machines. Magnetic core calculations. Direct current machines, single-phase and three-phase induction motors, three-phase synchronous motors, selsyns, linear motors. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 334 ***Electric Machinery*** (3.75 credits)
Prerequisite: ENGR 274. Three-phase circuits. Magnetic fields, circuits and forces; transformers; basic features of rotating machines; models, characteristics and applications of d.c. machines, polyphase synchronous and induction machines. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.
NOTE: Students in Electrical Engineering may not take this course for credit.

ELEC 341 ***Linear Network Analysis*** (3 credits)
Prerequisite: EMAT 312 previously or concurrently; ENGR 274. The s-plane and system functions. Network topology and equilibrium equations. One and two port networks. Indefinite admittance matrix and applications. State variable analysis. Signal flow graphs. Discussion of one computer-aided analysis program: SPICE. Lectures: 3 hours per week.

ELEC 351 ***Electromagnetic Waves and Guiding Structures*** (3 credits)
Prerequisite: EMAT 312 previously or concurrently;ELEC 251. Review of the differential forms of the laws of electromagnetism. Maxwell's equations. Boundary conditions. Power and energy. Uniform plane waves. Transmission line theory. Rectangular waveguides. Lectures: 3 hours per week. Tutorial: 1 hour per week.

ELEC 353 ***Basic Electromagnetics and Transmission Line Theory*** (3 credits)
Prerequisite: EMAT 312; ELEC 341. Laws of electromagnetism including differential forms. Boundary conditions. Maxwell's equations. Transmission line theory. Lectures: 3 hours per week. Turorial: 1 hour per week.

ELEC 401 ***Electrical Engineering Seminar*** (1 credit)
Prerequisite: ENCS 281. Seminars are organized on a regular basis to provide students with an opportunity to exercise their ability to present and defend their thoughts on topics of their own choice. Students will be encouraged to devote some of their presentations to such topics as continuing professional education and professional ethics. Seminars: 2 hours per week.

ELEC 411 ***Pulse Circuits*** (4.5 credits)
Prerequisite: EMAT 312; ELEC 312. Large signal analysis of diodes and transistors. Wave-shaping

circuits. Function generation. Design of gates and their practical limitations. Negative resistance devices in pulse generation. Lectures: 3 hours per week. Laboratory: 3 hours per week.

ELEC 415 ***Electronics III*** (4.5 credits)
Prerequisite: ELEC 312. Linear and nonlinear operational amplifier circuits such as stable-gain differential amplifiers, negative-impedance converters, gyrators, logarithmic amplifiers, precision rectifiers, voltage regulators, etc. Analog-to-digital and digital-to-analog converters. Computer-aided analysis of electronic circuits. Lectures: 3 hours per week. Laboratory: 3 hours per week.

ELEC 421 ***Solid State Devices*** (3.75 credits)
Prerequisite: ELEC 321. Physics of solid state devices. Basic semiconductor and physical mechanisms. The electronics of p-n junctions, of bipolar, junction and MOS Field Effect transistors. Planar silicon diodes will be designed, fabricated and evaluated in the laboratory. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 422 ***Integrated Circuit Design*** (4.5 credits)
Prerequisite: ELEC 421. The structure, characteristics and design of I.C. device components. Fabrication of I.C.'s: mask layout, interconnections, performances, reliability and yield of production. Competitive I.C. technologies. A planar bipolar transistor will be designed, fabricated and evaluated in the laboratory. Lectures: 3 hours per week. Laboratory: 3 hours per week.

ELEC 431 ***Electrical Power Systems*** (3.75 credits)
Prerequisite: ELEC 331. Inductance, capacitance, resistance of polyphase transmission lines; current and voltage relations of transmission lines; load flow studies; symmetrical and unsymmetrical faults; power system stability. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 433 ***Static Power Converters*** (3.75 credits)
Prerequisite: ENGR 372; ELEC 311; ELEC 331. Circuits and operating principles of phase-controlled converters; external performance characteristics; harmonic content of d.c. output voltage and a.c. input current; dual converters; converters as power amplifiers. Application to variable speed drives; d.c. machine dynamics, feedback control. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 441 ***Modern Filter Design*** (3.75 credits)
Prerequisite: ELEC 341. Image parameters, constant-k and m-derived filters. The approximation problem. Design of Butterworth, Tchebyscheff, and Bessel filters as terminated lossless networks. Design of constant-resistance all-pass networks. Design of active-RC filters using operational amplifiers. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 442 ***Digital Filters*** (3 credits)
Prerequisite: ELEC 341. Introduction to recursive and non-recursive digital filters; the z-transform; realization methods; amplitude and phase characteristics and relevant approximations and transformations; comparison of digital with conventional filters; application of digital filters. Lectures: 3 hours per week.

ELEC 453 ***Microwaves and Optics: Transmission*** (3.75 credits)
Prerequisite: EMAT 312; ELEC 341; ELEC 351. Plane waves, surface waves, wave impedance, surface impedance. Two-wire, coaxial and parallel-plate transmission lines. Waveguide modes, cutoff frequency, dispersion, losses. Dielectric optical waveguides, surface waveguides, microstrip. Principles of light transmission optics. Basic antenna theory, linear dipole, aperture antennas, diffraction, linear arrays. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 454 ***Microwaves and Optics: Circuits*** (3.75 credits)
Prerequisite: ELEC 453. Circuit theory for waveguiding systems, waveguide discontinuities. Binomial and Chebyshev impedance transformer design. Electromagnetic resonators, the Fabry-Perot resonator. Periodic structures, microwave filters. Faraday rotation and ferrite devices. E.M. wave propagation in optically active media, electro-optic devices. Principles of microwave tubes. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 455 ***Acoustics*** (3 credits)
Prerequisite: ELEC 351. Sound generation and propagation in elastic media; conversion between acoustical, electrical, and mechanical energy. Lumped-parameter approximations, sound in rooms, underwater acoustics, microphones; loudspeakers and audio communications problems; noise and vibration control problems. Lectures: 3 hours per week.

ELEC 461 ***Communication Circuits and Systems*** (3.75 credits)
Prerequisite: EMAT 312; ELEC 312. Principles of amplitude, frequency and phase modulation. Modulators, mixers, and demodulators. Representative examples of complete transmission systems. Qualitative treatment of modulation systems in the presence of noise. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 462 ***Statistical and Digital Communications*** (3.75 credits)
Prerequisite: EMAT 271; ELEC 461. Transmission and filtering of random signals, analysis of modulation systems, in particular Pulse Code Modulation, Phase Shift Keying, Frequency Shift

Keying, etc., and introduction to noise analysis, information theory and coding. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

ELEC 481 ***Electrical Engineering Project*** (4 credits)
Prerequisite: Registration in final year. The Electrical Engineering project provides an opportunity for each student to carry out a design project associated with one or more of the specialist elective courses, under the supervision of a faculty member. The nature of the project selected should be such as to require independent study of current technical literature. When feasible the designs will be assessed in the laboratory. Each student is to present a complete report at the end of the project. Equivalent laboratory time: 6 hours per week.

ELEC 498 ***Topics in Electrical Engineering*** (3 credits)
Prerequisite: Permission of the Department. This course may be offered in a given year upon the authorization of the Electrical Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in a given option or options. Lectures: 3 hours per week.

Industrial Engineering

INDU 310 ***Human Factor Engineering*** (3 credits)
This course treats the anatomical and physiological factors underlying design of man-machine interfaces; the psychological factors involved in the allocation of function between man and machines in an over-all system, for example, information processing capacity, acquisition and retention of skill, adaptability and the effects of stress. Lectures: 3 hours per week.

INDU 313 ***Industrial Economics*** (3 credits)
Prerequisite: ACCO 213. Development of economic performance measures. Sources of finance and the cost of money. Consideration of: life cycle costing, economic risk, tax regulations, inflation, short and long term forecasting techniques, model building, cost indices, elemental estimating, computerized information systems. Lectures: 3 hours per week.
NOTE: Students having completed BLDG 401 may not take this course for credit.

INDU 320 ***Production Engineering I*** (3 credits)
The systems approach to production; interrelationships among the component blocks of the system, including capacity planning, plant location, layout of physical facilities, maintenance. Lectures: 3 hours per week.

INDU 321 ***Production Engineering II*** (3 credits)
Prerequisite: INDU 320. A continuation of Production Engineering I, with emphasis on the design of the control systems for the production facility. Topics include allocation of resources, scheduling work methods and measurement, materials handling, process control and quality control. Lectures: 3 hours per week.

INDU 323 ***Industrial Operations Research*** (3 credits)
Prerequisite: COMP C211 (CEGEP Data Processing 911) or 212. An introduction to the application of mathematical models to various industrial problems; queuing theory, game theory, linear programming, inventory theory and Monte Carlo processes. Lectures: 3 hours per week.
NOTE: Students with credit for ENGR C412 may not take this course for credit.

INDU 330 ***Organizational Management*** (3 credits)
Organizational structures, their growth and change. Motivation, leadership and group behaviour. Design of alternatives for improving organizational performance and effectiveness. Lectures: 3 hours per week.

INDU 410 ***Safety Engineering*** (3 credits)
Prerequisite: INDU 310. The design of plant layout and work stations in order to provide a safe work environment. Safety features for machines. Industrial training methods. Accident prevention programmes. Cost of industrial accidents. Lectures: 3 hours per week. Tutorial: 2 hours per week.

INDU 411 ***Industrial Applications of Computers*** (3 credits)
Prerequisite: ELEC 318. Characteristics of computing systems from large scale machines to microcomputers. Applications of large machines including management information systems, inventory and production control. Determination of computing needs vis a vis the size of the machine used. Use of microcomputers as control elements in production systems. Automation. Future trends. Lectures: 3 hours per week.

INDU 420 ***Mathematics of Optimization*** (3 credits)
Prerequisite: INDU 323. Optimization techniques for industrial engineering applications. Advanced topics in linear programming. Network Analysis: transportation problems, maximal flow and minimal cost problems, assignment problems, shortest routes and project management. Dynamic programming: optimal decision policy, continuous state dynamic programming with single and multiple state variables; examples from production planning and inventory control. Non-linear programming: unconstrained optimization, constrained optimization with equality and inequality constraints, complementary pivot algorithms, separable programming. Case studies and applications. Lectures: 3 hours per week. Tutorial: 1 hour per week.

INDU 423 ***Inventory Control*** (3 credits)
Prerequisite: INDU 321; INDU 323. The basic features of production systems and methods of modelling their operation; materials requirement planning; inventory control; the role of inventories in physical distribution; inventories in manufacturing, aggregate planning and scheduling. Lectures: 3 hours per week.

INDU 480 ***Industrial Engineering Project*** (3 credits)
Prerequisite: Completion of 20 courses. INDU 481 concurrently. Students will be assigned, as individuals or as small groups, specific industrial engineering projects. It is expected that these projects will be drawn from local industry and will thus reflect actual problems faced by industry. The project report will be prepared under the supervision of a staff member. Lectures: 1 hour per week, 1 term. Laboratory: 2 hours per week, 2 terms.

INDU 481 ***Industrial Engineering Seminar*** (0.5 credit)
INDU 480 concurrently. Students are given the opportunity to make oral presentations of the work carried out for their project. These presentations will be video-taped and used as a teaching tool to improve verbal communication abilities. Seminar: 1 hour per week.

Mechanical Engineering

MECH 221 ***Materials Science*** (2 credits)
Prerequisite: CHEM C205 (CEGEP Chemistry 101). Relationships between properties and internal structure, atomic bonding; molecular, crystalline and amorphous structures; crystalline imperfections and mechanisms of structural change; micro-structures; structures and mechanical properties of polymers. Lectures: 2 hours per week. Tutorial: 2 hours per week.
NOTE: Students with credit for ENGR C221 may not take this course for credit.

MECH 311 ***Mechanical Engineering Laboratory I*** (2.5 credits)
Prerequisite: MECH 313 previously or concurrently. Fundamentals of manufacturing processes and their limitations, metrology, machine shop practice, forming, machining and casting processes, welding and joining, plastic production and non-conventional machining techniques. Laboratory includes use of basic machines, preparation of shop drawings with emphasis on production and field trips to local industries. Lectures: 2 hours per week. Tutorial: 2 hours per week, alternate weeks, 4 hours per week, alternate weeks including industrial visits. Laboratory: 2 hours per week, alternate weeks.

MECH 313 ***Machine Drawing and Design*** (3 credits)
Prerequisite: ENGR 213. The use of drawings and other graphical methods in the process of engineering design. Industrial standards and specifications, standard components and their use in product design. Detailed study of machine elements and assemblies, their representation and function in design and working drawings. Dimensioning and tolerance systems related to manufacturing processes, interchangeability, quality control, patent procedures. Pencil thinking and computer graphics in the design process. Computer aided machine drawing. A student design project will be an integral part of this course. An eight hour introduction to machine shop techniques forms part of the tutorial. Lectures: 3 hours per week. Tutorial: 2 hours per week.
NOTE: Students with credit for ENGR C214 and MECH C312 may not take this course for credit.

MECH 321 ***Strength and Failure in Metals*** (3 credits)
Prerequisite: MECH 221. The service capabilities of alloys and their relationship to microstructure as produced by thermal and mechanical treatments; material codes; material selection for design; strengthening mechanisms, composite materials. Modes of failure of materials; fracture, fatigue, wear, creep, corrosion, radiation damage. Lectures: 3 hours per week. Tutorial: 1 hour per week.

MECH 341 ***Kinematics of Mechanisms*** (2.5 credits)
Prerequisite: EMAT 232; ENGR 243. Geometry of motion and mobility criteria; kinematic analysis and synthesis of linkages; theory of spur gears, helical, worm and bevel gearing; gear trains and differentials; cam kinematics. Lectures: 2 hours per week. Tutorial: 2 hours per week, alternate weeks. Laboratory: 2 hours per week, alternate weeks.

MECH 342 ***Dynamics of Machines*** (2.5 credits)
Prerequisite: MECH 341. Kinematic analysis of space mechanisms; static and dynamic analysis of planar mechanisms and gear trains; dynamic analysis of space mechanisms; gyroscopic forces; balancing of rating and reciprocating machinery. Lectures: 2 hours per week. Tutorial: 2 hours per week, alternate weeks. Laboratory: 2 hours per week, alternate weeks.

MECH 351 ***Thermodynamics II*** (3.75 credits)
Prerequisite: COMP 212, ENGR 251. Brief review of ideal gas processes. Semi-perfect gases and the Gas Tables. Mixtures of gases, gases and vapours, air conditioning processes. Combustion and combustion equilibrium. Applications of thermodynamics to power production and utilization systems: study of basic and advanced cycles for gas compression, internal combustion engines, power from steam, gas turbine cycles and refrigeration. Real gases. The Mawell equations. Lectures: 3 hours per week. Tutorial: 1 hour per week. Laboratory: 3 hours per week, alternate weeks.

MECH 352 ***Heat Transfer I*** (3.75 credits)
Prerequisite: EMAT 311. Steady state and transient heat conduction, numerical methods for two-dimensional steady state heat conduction. Radiation heat exchange between black bodies, between grey bodies and from gases, vapours and flames. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 373 ***Instrumentation and Measurements*** (3.75 credits)
Prerequisite: ENGR 274. Unified treatment of measurement of physical quantities. Principle, characteristics, design and calibration of components and systems for measuring position, velocity, acceleration, force pressure, flowrate, temperature, proximity detection, etc. Background knowledge of electronics covering signal generation and processing. Concepts of accuracy and repeatability, linearity, response criteria, bandwidth, input and output impedance, matching of measuring systems, drift and bias. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 411 ***Mechanical Engineering Laboratory II*** (2.5 credits)
Prerequisite: MECH 311. Analytical review of current design practices and specification of standard components encountered in mechanical engineering. Introduction to overall system reliability estimates, interchangeability of mechanical devices and influence of stress-strength in determining the actual configuration of mechanical elements. Standard components covered include: various types of mechanical drives, cams, clutches, couplings, brakes, seals, fasteners, springs and bearings. Lectures: 2 hours per week. Tutorial: 2 hours per week. Laboratory: 2 hours per week, alternate weeks.

MECH 412 ***Computer Aided Mechanical Design*** (3.75 credits)
Prerequisite: MECH 313; MECH 411. Introduction to computer hardware, graphical input and output devices; computer-aided drawing; generation of points, vectors, 2D modeling, windowing, rotation, plane curves, 3D modeling and transformations; projections, space curves and surfaces, elimination of hidden lines and surfaces; orthographic and axonometric drawings; computer-aided linkage design; computer-aided design and analysis of machine elements; introduction to interactive graphics in CAD. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 421 ***Mechanical Shaping of Metals, Plastics and Composites*** (3.75 credits)
Prerequisite: MECH 221. Metal forming: extrusion, forging, rolling, drawing, pressing, compacting; shear line theory, sheet forming limits. Metal cutting, machineability, tooling. Plastics/Composites shaping: extrusion, pultrusion, molding, vacuum forming, lay-up, filament winding, laminating. Consideration of the mechanical parameters critical for process control and computer applications. Interaction of materials characteristics with processing to define product properties: cold working, annealing, hot working, super plasticity, thermomechanical treatment. Energy conservation, safety, product quality and liability. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 423 ***Casting, Welding, Heat Treating, and Non-Destructive Testing*** (3.75 credits)
Prerequisite: MECH 221. Comparative analysis of the various techniques of casting, welding, powder fabrication, finishing and non-destructive testing. Consideration of the control parameters that are essential to define both automation or robot application. Materials behaviour which determines product microstructure and properties. Technology and theory of solidification, normalizing, quenching, surface hardening, tempering, aging and thermomechanical processing for steels, cast irons and A1, Cu, Ni and Ti alloys. Energy conservation, worker safety, quality control and product liability. Lectures: 3 hours per week. Tutorial: 1 hour per week. Laboratory: 3 hours per week, alternate weeks.

MECH 441 ***Mechanical Engineering Design*** (3 credits)
Prerequisite: ENGR 244; MECH 313; MECH 342. Concepts in design; failure of mechanical elements under dynamic loading; shafting; bolted and welded joints; anti-friction and journal bearings; design of gears. Lectures: 2 hours per week. Laboratory: 2 hours per week.

MECH 443 ***Mechanical Vibrations*** (3.75 credits)
Prerequisite: EMAT 311; ENGR 274; MECH 342. Transient vibrations under impulsive shock, and arbitrary excitation: normal modes, free and forced vibration. Multi-degree of freedom systems, influence coefficients, orthogonality principle, numerical methods. Continuous systems; longitudinal torsional and flexural free and forced vibrations of prismatic bars. Lagrange's equations. Vibration measurements. Lectures: 3 hours per week. Tutorial: 1 hour per week. Laboratory: 3 hours per week, alternate weeks.

MECH 445 ***Machine Design*** (3.5 credits)
Prerequisite: MECH 441. Design of springs; design of gear and hydraulic drives, design for hydrodynamics and hydrostatic lubrication; optimum design of mechanical systems, design strategy, value and merit function, maximizing and minimizing procedures. Laboratory work includes an advanced design project representative of those encountered in industry. Lectures: 2 hours per week. Laboratory: 3 hours per week.

MECH 452 ***Heat Transfer II*** (3.75 credits)
Prerequisite: ENGR 362; MECH 352. Review of momentum transfer, free and forced convection heat transfer, dimensional analysis as applied to convection heat transfer configurations, heat exchangers,

introduction to mass transfer. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 453 ***Heating, Ventilation and Air Conditioning Systems*** (3 credits)
Prerequisite: MECH 352. Heating and cooling load calculation. Overview of heating and air conditioning systems. Review: Vapour compression refrigeration cycles, refrigerant properties, psychometrics. Performance characteristic of components: evaporators, condensers, compressors, throttling devices (expansion valves, capillary tubes). System performance characteristics: calculation of system operating conditions based on the capacities of its components and outdoor and indoor conditions. Controls: operational, capacity. Computer-aided design methods. Defrosting. Estimation of energy consumption for heating with heat pumps. Fundamentals of refrigerant piping, water piping, and air distribution systems. Experimental methods for system development. Lectures: 3 hours per week.

MECH 461 ***Gas Dynamics*** (3.75 credits)
Prerequisite: ENGR 362; MECH 351. Review of one-dimensional compressible flow. Normal and oblique shock waves; Prandtl-Meyer flow; combined effects in one-dimensional flow; non-ideal gas effects; multi-dimensional flow; linearized flow; method of characteristics. Selected experiments in supersonic flow, convergent-divergent nozzles, hydraulic analogue and Fanno tube. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 462 ***Turbomachinery and Propulsion*** (3 credits)
Prerequisite: ENGR 362; MECH 351. Overview of the gas turbine and its applications. Review of Brayton cycle and cycle modifications. Components arrangement; gas turbine cycles for propulsion. The Euler turbine equation, velocity triangles. Dimensional analysis of turbomachines. Two-dimensional cascades. Axial flow compressors, centrifugal compressors and axial flow turbines. Three-dimensional flow effects: radial equilibrium. Numerical solution of the radial equilibrium equation by finite differences and streamline curvature methods; design of turbomachines. Prediction of performance and off-design operation. Lectures: 3 hours per week.

MECH 463 ***Fluid Power Control*** (3.75 credits)
Prerequisite: ENGR 361; ENGR 372. Introduction to Fluid Power; pneumatic devices; fluidic devices; hydraulic system components; hydraulic and electro-hydraulic systems; dynamic performance of fluid power systems; fluid logic. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 464 ***Aerodynamics*** (3 credits)
Prerequisite: MECH 461. Theory of potential flow fields. Flows over immersed bodies, superposition of basic flows, method of source panels. Aerodynamic characteristics of isolated airfoils and of cascades of airfoils. The finite wing. Analytical and computational methods of subsonic and transonic flows over airfoils. Boundary layer effects and control. Lectures: 3 hours per week.

MECH 465 ***Gas Turbine Design*** (3.75 credits)
Prerequisite: MECH 462; MECH 464 concurrently. Study of practical criteria which influence the design of a gas turbine engine including relevant mechanical and aerodynamic constraints. The aerodynamics of each of the three major components of a modern turbo-fan engine, namely the compressor, the combustor and the turbine is considered. Air system acoustics, engine aerodynamic matching of components, and modern performance testing methods. A design project is assigned for each of these components. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 471 ***Microprocessors and Applications*** (3.75 credits)
Prerequisite: ELEC 318. Introduction to the concepts and practices of using microprocessors and micro-computers in such applications as instrumentation, manufacturing, control and automation; architecture and programming techniques; interface logic circuits: I/O systems; case studies of engineering applications. Lectures: 3 hours per week. Laboratory: 3 hours per week, alternate weeks.

MECH 481 ***Design or Experimental Project*** (3 credits)
Prerequisite: Registration in final year. A mechanical engineering design, simulation or experimental project appropriate to the senior level carried out under the supervision of a faculty member. A complete report is required at the end of the project. Equivalent laboratory time: 6 hours per week.

MECH 498 ***Topics in Mechanical Engineering*** (3 credits)
Prerequisite: Permission of the Department Chairman. This course may be offered in a given year upon the authorization of the Mechanical Engineering Department. The course content may vary from offering to offering and will be chosen to complement the elective courses available in a given option or options. Lectures: 3 hours per week.

71.80 Department of Computer Science

Professor of Computer Science, and Chairman of the Department
R. DE MORI

Professors
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C.Y. SUEN

Associate Professors
V.S. ALAGAR
J.W. ATWOOD
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T. FANCOTT
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S.L. KLASA
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H.F. LI
G. MARTIN
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B.C. DESAI
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P. GROGONO
R. JAYAKUMAR
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J. OPATRNY
D.K. PROBST
E. REGENER
F. SADRI

Adjunct Associate Professors
R. HAY
M.A. MARIN

Adjunct Assistant Professor
H.T. LAU

Computer Science is the application of available computer technology to receive, store, process, and deliver information. Areas of application range from information management in business environments, through numerical models of physical and social systems, to abstract representations of relationships and knowledge.

Computer Science is a relatively new field; as yet, no single approach to the education of computer scientists has been developed. Our programme is based on satisfying two major objectives: understanding the computer itself, and knowing how to use it in a field of endeavour. The programme is divided into two components: the core requirements, and the option requirements.

The core requirements encompass the foundations of information processing: the science of computer programming, the representation of information, the properties of algorithms, and the architecture of computing systems. The option requirements are concerned with techniques and applications of information management, in the area of interest.

The information systems option focuses on the application of computers in business, with a special emphasis on databases, software engineering, and management information systems.

The systems architecture option focuses on aspects of the design of digital circuits, and their integration into computer architectures. The theoretical computer science option focuses on numerical analysis and symbolic computation. The general science option permits the student to define an area of speciality within the sciences.

Development of solutions to problems in an area of endeavour requires that the student have not just a theoretical understanding of the problem and the potential solutions, but also a practical interest in delivering the solution.

71.80.1 COURSE REQUIREMENTS

To be recommended for the degree of Bachelor of Computer Science, students must satisfactorily complete an approved programme of at least 90 credits, comprising 32 credits of the core requirements and at least 58 credits as specified for one of the four options.

Computer Science Core

This is composed of 9 required courses of 3 credits each, 1 course of 2 credits and 3 laboratories of 1 credit each for a total of 32 credits.

COMP 224[3], 231[3], 244[3], 285[1], 291[1], 326[3], 335[3], 343[3], 352[3], 353[3], 354[3], 385[1] and ENCS 281[2]

1. Information Systems Option

NOTE: Admission profile is 10.12. Please refer to §71.10.1.

32	Computer Science Core
1	COMP 292 Language Laboratory - COBOL
9	Chosen from COMP 445[3], 451[3], 457[3], 458[3], 472[3], 474[3]
6	Elective Computer Science credits chosen from COMP or ENCS courses numbered above 220 but including no more than two language laboratory courses.

30 ACCO C213, C218, ECON C201, C203, FINA C314, MANA C266, MARK C213, QUAN C243, C244, C315
6 Elective credits chosen from courses having prefixes ACCO, ECON, FINA, MANA, or MARK except ACCO C220, C221, MANA C211
6 Chosen from any department*

*Certain courses are not creditable towards some 90-credit programmes, or cover certain material already found in the Computer Science or Option Cores. As such they are not recognized as electives. A listing of these exclusions and other information on choice of electives is found in the Faculty programme guide. Exceptions require the approval of the Dean's Office.

2. Systems Architecture Option

NOTE: Admission profile is 10.10. Please refer to §71.10.1.

32 Computer Science Core
1 Language Laboratory
3 COMP 361
6 Two courses chosen from COMP 325[3], 427[3], 445[3], ENCS 455[3]
6 Chosen from COMP or ENCS courses numbered above 220 but including no more than two language laboratories
27 EMAT 212, 232, 252, 271, 312, ENGR 273, 274, ELEC 311*
9 Chosen from ENCS 245, ENGR 372, 471, ELEC 312, 341, 442, 461, 462
6 Chosen from any department.*

*Certain courses are not creditable towards some 90-credit programmes or cover certain material already found in the Computer Science or Option Cores. As such they are not recognized as electives. A listing of these exclusions and other information on the choice of electives is found in the Faculty programme guide. Exceptions require the approval of the Dean's Office.

3. Theoretical Computer Science

NOTE: Admission profile is 10.10. Please refer to §71.10.1.

32 Computer Science Core
1 Language Laboratory
3 COMP 361
6 Chosen from COMP 436, 437, 441, 465
6 Chosen from COMP or ENCS courses numbered above 220 but including no more than two language laboratories
18 MATH C241, C261, C281
9 Mathematics credits chosen from one of the lists below*
9 Mathematics credits chosen from courses numbered from C312 through C397 and from C425 through C499
6 Chosen from any department**

*List 1 Discrete Mathematics: MATH C322, C381, C392, C393, C394, C432, C491, C492.
List 2 Numerical Methods and Operations Research: MATH C231, C312, C336, C337, C381, C432, C435, C436, C437.
List 3 Probability and Statistics: MATH C342, C343, C348, C351, C353, C448, C451, C454.

**Certain courses are not creditable towards some 90-credit programmes or cover certain material already found in the Computer Science or Option Cores. As such they are not recognized as electives. A listing of these exclusions and other information on the choice of electives is found in the Faculty programme guide. Exceptions require the approval of the Dean's Office.

4. General Science Option

NOTE: Admission profile is 10.10. Please refer to §71.10.1.

32 Computer Science Core
1 Language Laboratory
3 COMP 361 Elementary Numerical Analysis
12 Chosen from COMP or ENCS courses numbered above 220 but including no more than two language laboratories
18 MATH C241, C261, C281
18 Elective credits chosen from those offerings of the Faculty of Arts and Science which are creditable towards a 90-credit BSc programme or other courses as authorized by the Dean's office in consultation with the Department.
6 Chosen from any department*

*Certain courses are not creditable towards some 90-credit programmes or cover certain material already found in the Computer Science or Option Cores. As such they are not recognized as electives. A listing of these exclusions and other information on the choice of electives is found in the Faculty programme guide. Exceptions require the approval of the Dean's Office.

71.80.2 HONOURS PROGRAMME

Students should refer to Sections 16.2.4 and 16.2.5 of the calendar for academic regulations for the Honours Programme. In addition the following regulations apply to the BCompSc programme.

1. Students who are required to withdraw from the honours programme must enter the General Science Option.

2. Students entering the honours programme from the General Science option of the BCompSc must complete a minimum of 30 credits towards the degree after having been accepted as honours students. Other students entering the programme with advanced standing must complete a minimum of 30 credits of the basic honours requirements after having been accepted as honours students.

3. Students in the honours programme are required to confirm their standing with the Computer Science Department by November 15 of each year.

Requirements for Honours

32 Computer Science Core
1 Language Laboratory
9 COMP 361, 490, 492

12	Computer Science electives chosen in consultation with the Honours adviser from COMP and ENCS courses numbered above 220 but including no more than two language laboratories
24	MATH C241, C261, C271, C281, C351
6	Elective credits chosen from MATH C231, C336, C342, C343, C348, C432, C436, C448, C454
6	Elective credits chosen from any department*

*Certain courses are not creditable towards some 90-credit programmes, or cover certain material already found in the Computer Science or Option Cores. As such they are not recognized as electives. A listing of these exclusions and other information on the choice of electives is found in the Faculty programme guide. Exceptions require the approval of the Dean's Office.

71.80.3 MINOR IN COMPUTER SCIENCE

This programme is offered on both campuses.

NOTE: Admission profile is 10.12.

Minor in Computer Science

12	COMP 224, 231, 244, 285, 291 and one further language laboratory
12	Computer Science electives.

71.80.4 PROGRAMMES IN MANAGEMENT INFORMATION SYSTEMS

Both major and minor programmes in Management Information Systems can be found in the Commerce and Administration Section of the Undergraduate Calendar, §61.

Please note that new course numbers have been implemented. For equiva under the old system, please consult §200.6

Computer Science

COMP 224 & 285	COMP C221
COMP 244 & 291	COMP C241
COMP 292	COMP C251
COMP 325 & 386	COMP C325 & C426
COMP 326	COMP C322
COMP 343 & 385	COMP C443
COMP 353	COMP C453
COMP 392	COMP C341
COMP 423 & 485	COMP C423
COMP 427 & 486	COMP C427

COMP 212 ***FORTRAN for Engineers and Scientists*** (3 credits)
Prerequisite: MATH C204 or CEGEP Mathematics 105; MATH C205 or CEGI
Note: It is also assumed that students have had some exposure to comput
CEGEP course or through exposure to personal computers. A brief introducti
computing systems. A thorough grounding in the use of FORTRAN 77 as a to
engineering and scientific problems. Introduction to the principles of software e
specification, requirements analysis, programme design with emphasis on struc
testing and validation; programme documentation. Lectures: 3 hours per week. Tutorial: 1 hour per week.

COMP 218 ***Introduction to Computing for the Physically Handicapped*** (3 credits)
An introductory course intended for the physically handicapped. Topics covered in this course will include programming in BASIC with the help of microcomputers, study of computer assistance to the handicapped, and applications of personal computers and microcomputer based systems to different types of physical handicaps. Lectures: 3 hours per week. Tutorial: 1½ hour per week.
NOTE: Registration is limited to those physically handicapped persons who are judged able to benefit from the course and those working in the area of education for the physicaly handicapped. For further information contact the Dean of Students Office.

COMP 224 ***Introduction to Systems Programming*** (3 credits)
Prerequisite: COMP 244; COMP 285 previously or concurrently. Basic machine organization, data representation, instruction sets. The assembly and execution process, macros and macroprocessing. Input/output processing. Lectures: 3 hours per week.

COMP 231 ***Introduction to Discrete Structures*** (3 credits)
Prerequisite: MATH C204 (CEGEP Mathematics 105). Set theory, relations, propositional logic and proofs, algebraic structures, graphs, lattices and Boolean algebra, enumeration. Lectures: 3 hours per week. Tutorial: 1 hour per week.

COMP 244 ***Programming Methodology*** (3 credits)
Prerequisite: MATH C205 (CEGEP Mathematics 203); COMP 231 or COEN 231 previously or concurrently; COMP 291 previously or concurrently. Basic concepts of Computer Science. Problem-solving techniques, algorithm specification and development. Programme structures: procedures, data types, coding. Programming style, debugging, documentation. Lectures: 3 hours per week.

COMP 251 ***Introduction to Business Programming*** (3 credits)
Prerequisite: COMP C211 (CEGEP 420-911) or QUAN C221. Introduction to business data processing. Basic file organization and handling, record layouts, elementary information storage and retrieval. Detailed specifications of the Common Business Oriented Language (COBOL). Structured programming concepts will be emphasized. This course will include programming assignments involving basic business applications, to be prepared, tested and documented individually. Lectures: 3 hours per week. Tutorial: 1½ hours per week.
NOTE: Restricted to students registered in a Commerce and Administration programme.

COMP 285 ***Systems Programming Laboratory I*** (1 credit)
Prerequisite: COMP 224 previously or concurrently. Use of assemblers, syntax of an assembler language, use of debuggers, input/output programming, interrupts. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 291 ***Language Laboratory - Pascal*** (1 credit)
Prerequisite: COMP 244 previously or concurrently or COMP 212 previously. Use of computer system. Syntax and semantics of the programming language Pascal. The design, development, and documentation of programmes. Projects requiring the proper choice of data structures, control structures, and tools of software design. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 292 ***Language Laboratory - COBOL*** (1 credit)
Prerequisite: COMP 244 previously or concurrently. Use of computer system. Syntax and semantics of the programming language COBOL. The design, development, and documentation of programmes. Projects requiring the proper choice of data structures, control structures, and tools of software design. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 293 ***Language Laboratory - FORTRAN*** (1 credit)
Prerequisite: COMP 244 previously or concurrently. Use of computer system. Syntax and semantics of the programming language FORTRAN. The design, development, and documentation of programmes. Projects requiring the proper choice of data structures, control structures, and tools of software design. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 325 ***Digital System Design*** (3 credits)
Prerequisite: COMP 224; COMP 231; COMP 285; COMP 386 previously or concurrently. Reduction of Boolean expressions. Digital integrated circuits. Combinatorial circuits. Sequential logic, counters, shift registers. Microprocessors. Interfacing with external devices. Lectures: 3 hours per week.

COMP 326 ***Computer Architecture*** (3 credits)
Prerequisite: COMP 343 previously or concurrently. Classification schemes. Functional units, bussing systems and input/output structures, storage systems, instruction sets. Microprogramming. Survey of different kinds of computer architectures. Software influences on architecture. Advanced topics in computer architecture. Lectures: 3 hours per week. Tutorial: 1 hour per week.

COMP 335 ***Introduction to Theoretical Computer Science*** (3 credits)
Prerequisite: COMP 231 or COEN 231; COMP 244; COMP 291. Finite state automata, context free grammars, push-down automata, LL(1) and LR(1) parsing, Turing machines, computability and complexity theory, formal methods of programme specification, programme testing, and programme verification. Lectures: 3 hours per week.

COMP 343 ***Operating Systems*** (3 credits)
Prerequisite: COMP 224 or COEN 411; COMP 352; COMP 385 previously or concurrently. Operating system evolution and services. Process management: concept of processes, concurrent languages, process states, process communication, operating system structure, processor scheduling, monitors. System management: Virtual memory, resource allocation, queue management, communication with peripherals, exception handling. File systems. Interactive computation. Protection. Distributed systems. Lectures: 3 hours per week.

COMP 352 ***Data Structures and Algorithms*** (3 credits)
Prerequisite: COMP 231 or COEN 231; COMP 244; COMP 291. This course will emphasize the definition, usage, and manipulation of fundamental data structures and their associated algorithms: stacks and queues, trees, tables, lists, arrays, strings, sets. Lectures: 3 hours per week. Tutorial: 1 hour per week.

COMP 353 ***Files and Databases*** (3 credits)
Prerequisite: COMP 352. Files and access methods: Physical and logical organization, access methods, basic files, external sorting, B-trees, multi-key organizations. Classical database management: Modelling, data integrity, data independence and security, ANSI/SPARC architecture, data models (relational, hierarchical and network), database design, detailed study of the relational model. Lectures: 3 hours per week. Tutorial: 1 hour per week.

COMP 354 ***Software Engineering*** (3 credits)
Prerequisite: COMP 353 previously or concurrently. Software management, cost estimation, design and specification of modules, reliability, efficiency, system design and development principles, modification strategies, models and modelling, examples of systems and documentation. Lectures: 3 hours per week. Tutorial: 1 hour per week.
NOTE: Students having completed COEN 431 may not take this course for credit.

COMP 361 ***Elementary Numerical Methods*** (3 credits)
Prerequisite: COMP 231; COMP 244; COMP 291. Error analysis and computer arithmetic. Numerical methods for solving linear systems, Gaussian elimination, LU decomposition. Numerical solution of non-linear equations, fixed point iterations, rate of convergence. Interpolations and approximations, Lagrange polynomials, divided differences, discrete least-square approximation, Legendre polynomials. Numerical integration, Newton-Cotes formulas, Romberg integration. Emphasis will be on the development of efficient algorithms. Lectures: 3 hours per week.

COMP 362 ***Computer Applications of Statistics*** (3 credits)
Prerequisite: COMP 212 or 244 and 293; EMAT 271 or QUAN C244 or MATH C241. This course is designed to familiarize the student with the application of computers to statistical problems. Computer terminals and batch processing of Fortran programmes are used to develop a working

knowledge of standard programmes for control charts, analysis of experimental design, sampling plans, forecasting, and statistical analysis common to many other fields. Students are expected to be familiar with elementary statistics and to be able to programme in Fortran. Lectures: 3 hours per week.

COMP 385 ***Systems Programming Laboratory II*** (1 credit)
Prerequisite: COMP 343 previously or concurrently. Development of systems software (e.g., linkage editor, loader, etc.). Implementation of scheduling algorithms and protection schemes. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 386 ***Microprocessor Laboratory I*** (1 credit)
Prerequisite: COMP 325 previously or concurrently. Combinatorial and sequential logic design. Basic microprocessor interfacing. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 391 ***Language Laboratory - LISP*** (1 credit)
Prerequisite: COMP 244; 291. Syntax and semantics of the programming language LISP. Projects requiring the proper choice of data structures, control structures, and tools of software design. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 392 ***Language Laboratory - PL/I*** (1 credit)
Prerequisite: COMP 244; COMP 291. Syntax and semantics of the programming language PL/I. Projects requiring the proper choice of data structures, control structures, and tools of software design. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 393 ***Language Laboratory - APL*** (1 credit)
Prerequisite: COMP 244; COMP 291. Syntax and semantics of the programming language APL. Projects requiring the proper choice of data structures, control structures, and tools of software design. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 394 ***Language Laboratory - Ada*** (1 credit)
Prerequisite: COMP 244; COMP 291. Syntax and semantics of the programming language Ada. Projects requiring the proper choice of data structures, control structures, and tools of software design. Laboratory: 2 hours per week. Tutorial: 1 hour per week.

COMP 423 ***System Software Design*** (3 credits)
Prerequisite: COMP 343; COMP 385; COMP 485 previously or concurrently. Principles and practice of the design of software for an operating system. Management of concurrent processes. Interaction among system utilities, operating system functions, and operating system data structures. Distributed computing software. Lectures: 3 hours per week.

COMP 427 ***Microprocessor Systems Architecture*** (3 credits)
Prerequisite: COMP 325; COMP 386; COMP 486 previously or concurrently. Microcomputer families. Memory interface. I/O systems. Peripheral control. Single-chip microprocessors. Coprocessors. System busses. Board level design. Multicomputer systems. Communication architecture. Lectures: 3 hours per week.

COMP 436 ***Introduction to the Theory of Automata*** (3 credits)
Prerequisite: COMP 335. Description of finite state automata and machines. Regular expressions, Kleene's theorem, minimization. Computability, Church's thesis, unsolvability. The syntactic monoid. Lectures: 3 hours per week.

COMP 437 ***Symbolic Computation*** (3 credits)
Prerequisite: COMP 335; COMP 352. Comparison, familiarization and use of several symbolic systems and languages (such as MACSYMA, MU-MATH, REDUCE, SAC). Symbolic algebra, factorization, integral and differential calculus, method of homomorphism. Lectures: 3 hours per week.

COMP 441 ***Comparative Study of Programming Languages*** (3 credits)
Prerequisite: COMP 352; COMP 391 previously or concurrently. This course introduces programming language design and supporting run-time structures. Some recent languages (functional, relational, and concurrent) which are substantially different from conventional languages will be chosen for discussion. Lectures: 3 hours per week.

COMP 442 ***Compiler Design*** (3 credits)
Prerequisite: COMP 224; COMP 285; COMP 335; COMP 352. Compiler organization and implementation. Programming language constructs, their syntax and semantics. Syntax directed translation, code optimization. Run-time organization of programming languages. Lectures: 3 hours per week.
NOTE: Students with credit for COMP 342 may not take this course for credit.

COMP 445 ***Data Communication and Computer Networks*** (3 credits)
Prerequisite: COMP 326 or COEN 416. The study of remote access to and communications between computers. Network architectures and topology; communication protocols and interfaces, functional layers; transmission facilities including communications equipment, line utilization, switching, and error handling; standard protocols; network interfaces including routing and flow control; point-to-point, broadcasting, and local networks theory and current practice; high-level protocols; reliability

and security, encryption. Lectures: 3 hours per week.
NOTE: Students with credit for COMP 372 or 373 may not take this course for credit.

COMP 451 ***Database Design*** (3 credits)
Prerequisite: COMP 353. Review of the relational data model, and introduction to distributed databases. DBMS architectures. Data dependencies, decomposition algorithms. Data dictionaries. Concurrency, integrity, security and reliability issues. Query decomposition, optimization and evaluation strategies. Physical database design. Lectures: 3 hours per week.

COMP 456 ***Information Retrieval*** (3 credits)
Prerequisite: COMP 353. The basic problems of information retrieval. Application of information theory to text processing and storage. Application of file and database techniques for text storage and retrieval. Question logic and processing considerations. Free text search algorithms. Measures of retrieval effectiveness. Lectures: 3 hours per week.

COMP 457 ***Office Automation*** (3 credits)
Prerequisite: COMP 352. Design of an office automation system. Technical aspects of some office functions. Petri nets. Communication networks. Interface design. Security and cryptography. Future developments. Lectures: 3 hours per week.

COMP 458 ***Structure of Information Systems*** (3 credits)
Prerequisite: COMP 353. Information systems and organizations. Representation and analysis of system structure. Decision theory. Information system applications. Information centres. System evaluation and selection. Lectures: 3 hours per week.

COMP 463 ***Discrete System Simulation*** (3 credits)
Prerequisite: COMP 244 and 291; MATH C241 or QUAN C244 or EMAT 271. Discrete random variables and their distributions. A comparison of simulation techniques: discrete, continuous and hybrid. Queueing models, analysis of data. Model building. Review of simulation languages. Application to business problems and operations research. Lectures: 3 hours per week.
NOTE: Students with credit for COMP 475 may not take this course for credit.

COMP 465 ***Analysis of Algorithms*** (3 credits)
Prerequisite: COMP 352; COMP 361. Empirical and theoretical measures of the efficiency of algorithms. A study of good algorithms related to sorting, matrix multiplication, fast Fourier transform, integer and polynomial arithmetic, and graph theory. A survey of hard problem, NP-completeness, and interactable problems. Lectures: 3 hours per week.

COMP 471 ***Computer Graphics*** (3.75 credits)
Prerequisite: COMP 326 or COEN 416; COMP 352. Display memory; generation of points, vectors, etc. Interactive versus passive graphics; CRT devices and plotters, analog storage of images. Digitizing and digital storage. Pattern recognition. Data structures and graphics software. The mathematics of three-dimensional transformations; projections. Applications in computer-aided design and instruction. Lectures: 3 hours per week. Laboratory: 1½ hours per week.

COMP 472 ***Introduction to Artificial Intelligence*** (3 credits)
Prerequisite: COMP 352; COMP 391 previously or concurrently. Scope of AI. Knowledge representation and inference using predicate calculus and semantic networks. List processing. Heuristic programming: state-space search and problem-reduction strategies. Other topics include: Game heuristics; symbolic pattern matching; AI production systems; natural language processing; study of a large AI system. Lectures: 3 hours per week.

COMP 473 ***Pattern Recognition*** (3 credits)
Prerequisite: COMP 352. Optical character recognition; sequential and parallel recognition methods; Bayesian decision procedures; perceptrons; statistical and syntactic approaches; recognition grammars; feature extraction and selection, scene analysis. Lectures: 3 hours per week.

COMP 474 ***Introduction to Expert Systems*** (3 credits)
Prerequisite: COMP 472 previously or concurrently. Structure of an expert system. History of expert system development. Rule-based expert systems. Algorithms for rule chaining. Knowledge representation. Knowledge acquisition. Reasoning with uncertain information, modification to knowledge, self-explanatory capability, user interfaces. Design of a small expert system for commercial or other applications. Lectures: 3 hours per week.

COMP 485 ***Systems Software Laboratory*** (1 credit)
Prerequisite: COMP 423 previously or concurrently. Shell Language. Systems programming language. Design of high- and low-level utilities. Device driver design. System configuration. Laboratory: 2 hours per week.

COMP 486 ***Microprocessor Laboratory II*** (1 credit)
Prerequisite: COMP 427 previously or concurrently. Design and implementation of dedicated hardware and software for microprocessor and single-chip microcomputer applications. Laboratory: 2 hours per week.

COMP 490 ***Computer Science Project I*** (3 credits)
Prerequisite: Completion of 60 credits. Students will work on a computer science project under the supervision of a faculty member and submit a suitable written report on the work carried out. Students planning to register for this course should consult with the department prior to registration in the final year of study.

COMP 492 ***Computer Science Project II*** (3 credits)
Prerequisite: COMP 490 previously or concurrently. Students having permission of the department to carry out a major project will register for both COMP 490 and 492. Alternatively, they may carry out a second smaller project.

71.90 Certificate Programme in Quality Control

The programme leading to the Certificate in Quality Control is offered at the Loyola Campus, in the evening only.

71.90.1 ADMISSION REQUIREMENTS

Applications for admission to the certificate programme in Quality Control are submitted to the Admissions Office at the Loyola Campus.

General Admission requirements are listed in §13.

Special requirements are a Diploma of Collegial Studies, or its equivalent, including the CEGEP courses Mathematics 103, 105 and 203, or their equivalents. (Profile 10.12).

Students entering the certificate programme in Quality Control are presumed to have acquired some familiarity with computers and programming, either through a course or through time spent working with a personal or other computer.

71.90.2 CURRICULUM FOR THE CERTIFICATE IN QUALITY CONTROL

To be recommended for the award of the Certificate in Quality Control, students must satisfactorily complete the programme of 48 credits specified below. Of the total credits required, 36 pertain directly to quality control, while the remainder are from computer science, mathematics and other allied areas. The courses offered in the programme will provide the student with an in-depth understanding and working knowledge of the principles and practices used in the rapidly expanding field of quality control.

The programme is fully endorsed by the Montreal Section of the American Society for Quality Control (ASQC). It has been designed in keeping with the requirements stipulated by the Education Institute of the ASQC headquarters and, as such, does much to prepare candidates for the ASQC Quality Engineer Certificate examinations. It should be noted, however, that the certificate programme does not lead to admission to the Order of Engineers of Quebec, or to the legal use of the title Engineer.

71.90.3 ACADEMIC REGULATIONS

Students are subject to the academic regulations of the University.

71.90.4 COURSE REQUIREMENTS

To be recommended for the award of the Certificate, students must satisfactorily complete the following courses:

QUAL 200	Elementary Metrology
QUAL 201	Advanced Metrology
QUAL 202	Statistical Quality Control
QUAL 203	Statistical Sampling
QUAL 204	Basic Concepts of Reliability
QUAL 205	Reliability Engineering
QUAL 206	Quality Management
QUAL 207	Design of Experiments
QUAL 208	Quality Assurance Technology
QUAL 209*	Accounting for Quality Control
QUAL 210	Computer Applications of Statistics
COMP 212	FORTRAN for Engineers and Scientists

3 elective credits from Computer Science or Quantitative Methods

*Students admitted before 01 June 1980 may replace this course with QUAN 221.

Course descriptions are given below, except for those with the prefixes QUAN or COMP, which may be found in the Commerce and Administration and Computer Science sections of the calendar.

Please note that new course numbers have been implemented. For equivalent course numbers under the old system, please consult §200.6.

QUAL 200 ***Elementary Metrology*** (3 credits)
Prerequisite: MATH C204; MATH C205 (CEGEP Mathematics 105 and 203). An introductory course dealing with general measurement concepts, methods for estimating accuracy, systematic and constant errors.
Included are: mathematical bases of metrology, statistical analysis of measurement, master standards, principles involved in the use of projectors, pneumatic comparators, and direct reading measuring machines.

QUAL 201 ***Advanced Metrology*** (3 credits)
Prerequisite: QUAL 200; QUAL 202. This course applies the principles presented in Elementary Metrology, and explores the value of these principles through everyday applications to modern technology.
Special consideration is given to the 'Système International' (Modernized Metric System) and its influence on industry (including the use of conversion tables and formulae).

The course treats non-destructive testing techniques and their applications, including (in some depth) radiographic, ultrasonic and nucleonic gauging and measurement.

QUAL 202 ***Statistical Quality Control*** (3 credits)
Prerequisite: MATH C204; MATH C205 (CEGEP Mathematics 105 and 203). Techniques for establishing, monitoring and maintaining process control of manufactured products. A workshop course with full student participation in solving a variety of practical statistical quality control problems. Discussed are the concept of variation, frequency distributions, functions of a frequency distribution, the various types of control charts including those for attributes and variables data, analysis of patterns, process capability studies and other related topics.

QUAL 203 ***Statistical Sampling*** (6 credits)
Prerequisite: QUAL 202. Statistical sampling theory and its application to quality control. Also discussed in lecture workshop/sessions are risks for producer and consumer.
Topics include elements of probability theory; the binomial; Poisson, and hyper-geometric distribution; sampling theory; sampling plans, classification of sampling plans—AQL, AOQL and LTPD, types of sampling plans within each classification, such as single, double, multiple, unit sequential, and continuous plans and their associated operating characteristic curves. MIL-STD-105D and MIL-STD-414 are discussed in detail and the Dodge and Romig tables are highlighted.

QUAL 204 ***Basic Concepts of Reliability*** (3 credits)
Prerequisite: QUAL 202. A mixed format of lectures, workshops, problems and discussions designed to familiarize the student with the basic principles of reliability. Building gradually from historical review, definitions and concepts, the course discusses probability theory, Poisson and exponential distributions, reliability equation, MTBF and failure rate concepts, Weibull analysis, mean and median ranks, confidence statements, life characteristic curves, system reliabilities, standby systems, associated problems and other related topics.

QUAL 205 ***Advanced Reliability*** (3 credits)
Prerequisite: QUAL 202; QUAL 204. Statistical methods in life testing. Introduction, reliability concepts and definitions, historical review and development. Life characteristic curve, Poisson and exponential distributions, exponential reliability equation, MTBF and failure rate concepts.
Chi square confidence statements and intervals, Weibull analysis, mean and median ranks, associated problems. Probability theory, system reliabilities, standby systems, and other related topics.

QUAL 206 ***Quality Management*** (3 credits)
Prerequisite: MATH C204; MATH C205 (CEGEP Mathematics 105 and 203). Emphasis is on general principles of planning and management rather than quality control methodology. The concept of total quality control, from design, development and manufacture to customer use, is developed.
The economics of quality, the planning and implementation of ■ quality cost programme, organization for quality, procurement quality control, in-process control, motivation for quality, value engineering, system quality audit, customer feedback and product liability are topics treated in detail.

QUAL 207 ***Design of Experiments*** (6 credits)
Prerequisite: QUAL 202. An introductory course, providing a more systematic approach to experimentation with emphasis on the use of statistical designs for data interpretation and known confidence in the result and overall costs.
The course covers: tests of hypotheses, F, t, and X^2 tests, analysis of variance, goodness of fit tests, use of probability paper, and control chart analysis of experimental results. Also included are experimental design methods such as: full and fractional factorial designs, regression analysis, multiple and random balance designs, latin square, cube and nested designs, etc.

QUAL 208 ***Quality Assurance Technology*** (6 credits)
Prerequisite: QUAL 202. The basic principles of quality assurance, and its definition as a planned and systematic pattern of actions necessary to provide adequate confidence that a product or service conforms to established requirements. The development of the individual quality system in a modular format to cover the various phases of the industrial and commercial enterprise. Topics include: development of Quality Organizations, systems engineering, closed loop feedback systems, principle of modular systems, what the customer expects versus what he gets, development of quality product, computer software QA, product safety and reliability, vendor-vendee relations, manufacturing, processing and post-production servicing.

QUAL 209 ***Product Cost Control*** (3 credits)
Prerequisite: MATH C204; MATH C205 (CEGEP Mathematics 105 and 203). This course introduces the student to product cost control and related areas. Topics include introductions to: accounting, procedures, cash flow, budgeting, capital equipment costing and amortization, product costing, cost of quality control systems ('quality costs'). Lectures: 3 hours per week.

QUAL 210 ***Computer Application of Statistics*** (3 credits)
This course is designed to familiarize the student with the application of computers to statistical problems. Computer terminals and batch processing of Fortran programmes are used to develop a working knowledge of standard programmes for control charts, analysis of experimental design,

sampling plans, forecasting and statistical analysis common to many other fields. Students are expected to be familiar with elementary statistics and to be able to programme in Fortran. *NOTE A/See §200.6*

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81 Faculty of Fine Arts

81.10 PROGRAMMES AND ADMISSION REQUIREMENTS
81.10.1 Regular Programme
81.10.2 Mature Entry
81.10.3 Extended Credit Programme
81.10.4 Transfer Students
81.10.5 Portfolio Evaluation Committee
81.10.6 Portfolio Submission
81.10.7 Music Theory Placement Test
81.10.8 Music Auditions
81.10.9 Theatre Interviews/Auditions/Portfolios

81.20 DEGREE REQUIREMENTS
81.20.1 BFA Degree Requirements
81.20.2 Residence Requirements
81.20.3 Course Load
81.20.4 BFA Honours Programme Requirements
81.20.5 Diploma in Art Education
81.20.6 Diploma in Art Therapy

81.30 FACULTY OF FINE ARTS COURSES

81.40 INTER-RELATED ARTS

81.50 ART EDUCATION AND ART THERAPY

81.60 ART HISTORY

81.70 CINEMA AND PHOTOGRAPHY

81.80 CONTEMPORARY DANCE

81.90 DESIGN

81.100 MUSIC

81.110 PAINTING AND DRAWING

81.120 PRINTMAKING

81.130 SCULPTURE, CERAMICS AND FIBRES

81.140 THEATRE

81 Faculty of Fine Arts

Dean
ROBERT PARKER

Assistant Deans
MARIO FALSETTO, *Student Affairs*
CATHERINE MACKENZIE, *Academic Programmes*

81.10 Programmes and Admission Requirements

81.10.1 REGULAR PROGRAMME

General admission requirements for the 90-credit degree programme are listed in §13.

The Faculty of Fine Arts consists of two divisions, comprising nine departments and one section offering numerous programmes. Specific information concerning the programmes and their specific admission requirements are listed below.

FACULTY OF FINE ARTS

For information concerning any of the following programmes, please consult the calendar section listed opposite each programme.

Profile*	Programme	Calendar Section
00.0G	Inter-Related Arts, major	81.40

DIVISION OF PERFORMING ARTS

The Performing Arts Division consists of a Department of Music, a Department of Theatre and a section of Contemporary Dance.

00.0A	Contemporary Dance, major	81.80
00.0A	Drama in Education, specialization	81.140
00.0A	Integrative Music Studies, major	81.100
10.7A	Jazz Studies, specialization	81.100
00.0	Music, minor	81.100
10.7A	Music Performance Studies, specialization	81.100
10.7A	Music Theory/Composition, specialization	81.100
10.7A	Selected Music Studies, specialization	81.100
00.0A	Theatre, major	81.140
00.0	Theatre, minor	81.140
00.0A	Theatre Performance, specialization	81.140
00.0A,K	Theatre Scenography, honours	81.140

DIVISION OF VISUAL ARTS

The Visual Arts Division consists of the following seven departments: Art Education & Art Therapy; Art History; Cinema & Photography; Design; Painting & Drawing; Printmaking; Sculpture, Ceramics & Fibres.

00.0	Archaeology, minor	81.60
10.6	Art Education, specialization, major	81.50
00.0	Art History, honours, major, minor	81.60
10.6	Art History & Studio Art, major, minor	81.60, 81.110
10.6	Ceramics, major	81.130
00.0A,K	Cinema, major	81.70
00.0	Cinema, minor	81.70
10.6A,G,K	Design Art, major	81.90
10.6	Fibres, major	81.130
00.0K	Film Animation, minor	81.70
00.0A,K	Film Production, specialization	81.70
00.0A,K	Film Studies, specialization	81.70

00.0	Film Studies, minor	81.70
00.0A,K	Photography, major, minor	81.70
10.6	Printmaking, specialization	81.120
10.6	Sculpture, major	81.130
10.6	Studio Art, major	81.110

*Please note the following explanation of the letters appearing after the profile number.
A: Interview/Audition
G: Letter of Intent
K: Submission of a Portfolio

81.10.2 MATURE ENTRY

General admission requirements to the 108 credit programme (Mature Entry) are listed in §14.

Students admitted into the Faculty of Fine Arts by the Mature Entry plan are required to complete 18 credits in addition to the 90 credits normally required for the BFA degree. Fine Arts students are required to complete 18 credits appropriate for entry into the student's ultimate area of concentration and chosen with the approval of a Faculty adviser

81.10.3 EXTENDED CREDIT PROGRAMME

Students admitted to the 120-credit Extended Credit Programme in Fine Arts are required to complete 30 credits in addition to the 90 credits normally required for the BFA degree. A maximum of 18 of these credits may be selected from courses offered in the Faculty of Fine Arts. A listing of the courses in Fine Arts which may be applied towards the Extended Credit Programme are available in the Office of Student Affairs, Faculty of Fine Arts.

Fine Arts students are recommended to complete the following courses:

6	credits in English or French
24	credits appropriate for entry into the student's ultimate area of concentration chosen with the approval of a Faculty adviser. Students wishing to apply for programmes in all the studio art departments should complete Art C200 as 6 of these elective credits.

81.10.4 TRANSFER STUDENTS

Applicants who have completed courses in other colleges or universities are granted credits (advanced standing) on the basis of the programmes at Concordia University.

Applicants to programmes in studio art must submit , upon application, a portfolio and/or slides of their work to the Portfolio Evaluation Committee of Visual Arts for placement recommendation (See 81.10.5 and 81.10.6).

Applicants to a second Bachelor's degree must complete 60 credits, other than those credited towards the first degree, at least 36 of which must be taken in the new field of specialization (§16.1.5). Students transferring credits towards a first degree must complete a minimum of 45 credits at Concordia (see §16.1.5).

Students must complete all programme and degree requirements, as well as the Faculty of Fine Arts residence requirements (see §81.20.2).

81.10.5 PORTFOLIO EVALUATION COMMITTEE

The foundation course for all studio art programmes in Visual Arts is Art C200. Students without the recommended background (10.6 profile) in the CEGEP may wish to apply for an exemption from Art C200 on the basis of previous studio art work. They must submit a portfolio containing examples of their art work which should include examples of drawing, painting, two-dimensional design, three-dimensional design, AND/OR sculpture, and related media, usually a minimum of 20 and a maximum of 30 works.

Applicants must submit portfolios to request advanced placement in any of the studio art areas, in addition to the portfolio submitted for Art C200 exemption. For advanced standing in any of the studio art areas, students should submit a minimum of 5 and a maximum of 15 examples of work in the specific area in which the exemption is being sought.

It is the responsibility of the applicants to submit their portfolios before the deadline specified below. If applicants do not know whether they are required to submit a portfolio they should contact the Department (see below).

81.10.6 PORTFOLIO SUBMISSION

All portfolios requesting exemption for Art C200 should be submitted to the secretary of the Department of Painting and Drawing. Portfolios requesting advanced standing should be submitted to the secretary of the department offering the course for which exemption is being sought.

To ensure early processing of applications for degree applicants to the Faculty of Fine Arts studio art programmes, the deadline for portfolio submission is March 14, 1986 (4:00 p.m.).

Students in other faculties and Independent students wishing to register for a studio art course, other than Art C200, must submit a portfolio requesting exemption for Art C200. The deadline for submission of portfolio for non-applicants is August 15, 1986 (4:00 p.m.).

81.10.7 MUSIC THEORY PLACEMENT TEST

All applicants with prior music study, except those who have received written notification of exemption for Music C210, must contact the Department of Music to arrange a Theory Placement Test.

Students who have not been accepted into a programme in Music who wish to register

for courses in Music which have a theory prerequisite must arrange with the Department of Music to write a Theory Placement Test prior to registration appointments.

81.10.8 MUSIC AUDITIONS

Any student wishing to register for a music ensemble, the orchestra, the choir, etc. must contact the Department of Music at least two weeks prior to registration to arrange an audition.

81.10.9 THEATRE INTERVIEWS/ AUDITIONS/PORTFOLIOS

All applicants to programmes in Theatre are required to attend an interview as part of the admission process.

Applicants wishing to specialize in Theatre Scenography must bring along a portfolio of material which demonstrates their creative abilities and interests.

Applicants who indicate an interest in Theatre Performance, in Drama in Education and in the Major in Theatre are required to audition.

Applicants are required to contact the Department of Theatre before March 14 to arrange their appointments and for specific information.

81.20 Degree Requirements

Students preparing for the degree of Bachelor of Fine Arts require a minimum of 90 credits. Each credit represents, for the average student, a mimimum of 45 hours of work spread across lectures, conferences, tutorials, studios, rehearsals or practice-periods, tests, examinations, and personal work.

81.20.1 BFA DEGREE REQUIREMENTS

A. A candidate for the degree of Bachelor of Fine Arts must have qualified for admission to, and successfully completed a programme of concentration in the form of an Honours, Specialization, Major or a Double Minor* programme in the Faculty of Fine Arts. A selection is made upon entry, prior to registration. The requirement of selecting a programme upon entry should not be thought of as being necessarily a final commitment. Students wishing to transfer out of one degree programme must satisfy the admission requirements of the programme they seek to enter. Programme changes are, however, subject to limitations where certain programmes are in great demand. Students should be aware that to effect certain transfers they may be required to complete more than the 90 credits normally required for the degree.

**A Minor consists of an approved sequence of 24-30 credits. The term "Double Minor" refers to a combination of two minors selected from the Faculty of Fine Arts; a planned programme of study in two specialized fields in Fine Arts with a lower degree of concentration in both than is afforded by a Major programme.*

B. A candidate for graduation must have successfully completed at least 18 credits selected from course offerings outside the Faculty of Fine Arts. (Courses in the Department of Communication Studies do not fulfill this requirement of outside the Faculty of Fine Arts.) Within every block of 30 credits taken towards the degree, a student is encouraged to choose no more than 24 credits from the Faculty of Fine Arts.

C. A candidate for graduation normally may apply no more than 54 credits in studio work towards the 90 credits required for the BFA degree.

D. The credits obtained for any course may not be used to satisfy the requirements of more than one programme.

Students preparing for the degree of Bachelor of Fine Arts require a minimum of 90 credits. Each credit represents, for the average student, a minimum of 45 hours of work spread across lectures, conferences, tutorials, studios, rehearsals or practice periods, tests, examinations, and personal work.

81.20.2 RESIDENCE REQUIREMENTS

Students are subject to the University residence requirement (see §16.1.5) which states that of the 90 credits required for the Bachelor of Fine Arts degree, a minimum of 45 credits must be taken at Concordia University. Combining both residence requirements implies that the full-time student must enroll for a minimum of two years of study at Concordia University.

To fulfill the residence requirements for a BFA degree with a concentration in:

1. Art Education, Ceramics, Design Art, Fabrics, Printmaking, Sculpture, or Studio Art: a minimum of 30 credits in Studio Art and 6 credits in Art History must be completed at Concordia.
2. Cinema, Film Animation, Film Production, Film Studies, or Photography: at least half of the required credits from the Department of Cinema and Photography must be completed at Concordia.
3. Drama in Education, Theatre, Theatre Performance, or Theatre Scenography: a minimum of 30 credits from the Department of Theatre must be completed at Concordia.
4. Integrative Music Studies, Jazz Studies, Music Performance Studies, Music Theory/ Composition, or Selected Music Studies: a minimum of 30 credits required from the Department of Music must be completed at Concordia.
5. Art History, Art History and Studio Art: at least half of the required credits in Art History and Studio Art must be completed at Concordia.
6. Minor programmes: at least half of the required credits must be completed at Concordia.

81.20.3 COURSE LOAD

The normal course load for students enrolled in the Faculty of Fine Arts is 30 credits per year for all full-time students, and a maximum of 18 credits per year for part-time students.

i) Full-time students may not register for more than 18 credits of their maximum 30 credits in any studio area in any given academic year. Part-time students may not register for more than 12 credits.

ii) Students may register for a maximum of 6 credits in which films are produced as a course requirement during any given academic year. *See §81.70 for list of courses.* Also, students are limited, during their degree programme, to 18 credits in Film Production or Film Animation courses in which films are produced as a course requirement (§81.70). With special permission, Cinema Majors in Option B, Film Animation are permitted to complete a total of 24 credits in these courses, of which 12 credits may be taken in any one year.

iii) Students may register for a maximum of 3 credits in Theatre Production in any given academic year.

iv) Students may register for a maximum of 6 credits in Music Private Study in any given academic year.

81.20.4 BFA HONOURS PROGRAMME REQUIREMENTS

See Academic Regulations §16.2.4.

Prospective Honours Students must apply for entry to the programme after the completion of 30 credits and prior to the commencing of their final 30 credits of the BFA degree.

Applications are made through the Honours adviser of the Department upon completion of 30 credits.

81.20.5 DIPLOMA IN ART EDUCATION

The Faculty of Fine Arts offers a one-year post-graduate programme leading to the Diploma in Art Education. This programme is integrated with the Bachelor of Fine Arts (Specialization in Art Education) to provide a continuous pattern of studies preparing art specialists for teaching in elementary and secondary schools.

In order to qualify for admission, students must have completed the Concordia University Bachelor of Fine Arts (Specialization in Art Education) or the equivalent. Graduates of other institutions will be considered if they have had the equivalent of an undergraduate major in studio work and can present an acceptable portfolio. They will be expected to make up the Education and Art Education courses included in the BFA degree, Specialization in Art Education.

The Diploma Programme is offered in the day only. Graduates who have been awarded the Diploma in Art Education meet the requirements for a Specialists Certificate in Art, awarded by the Quebec Board of Education.

A detailed description of the Programme may be found in the Graduate Studies calendar.

81.20.6 DIPLOMA IN ART THERAPY

The Faculty of Fine Arts offers a one year post-graduate programme leading to the Diploma in Art Therapy.

This programme is designed to offer intermediate training for students intending to become qualified art therapists through further graduate study and to provide basic skills in art therapy for members of the helping professions who wish to develop the use of the visual arts in their work.

Normally the programme takes one year of full-time study; however, classes are arranged, as far as possible, to accommodate part-time students, who are expected to complete a minimum of two courses (12 credits) in their first year. The programme includes a practicum requirement.

Admission to the programme depends upon a suitable background of study in art and psychology. Students must have completed the Bachelor of Fine Arts, Major in Art Education at Concordia University or its equivalent.

A detailed description of the programme may be found in the Graduate Studies calendar.

81.30 Faculty of Fine Arts Courses

The following courses provide a format in which topics of Faculty-wide interest are considered:

FFAR C220 ***Sound in Fine Arts*** (3 credits)
A studio course dealing with the basics of sound and its application in the fine arts. Topics may include production aspects of sound in performance art, video art, dance and the theatre arts. The problems of copyright and ownership of the artistic materials are also considered.

FFAR 398 ***Special Topics in Fine Arts*** (3 credits)
A course which provides an opportunity for the study of specialized aspects of Fine Arts. *NOTE C/See §200.3*

FFAR 399 ***Special Topics in Fine Arts*** (6 credits)
A course which provides an opportunity for the study of specialized aspects of Fine Arts. *NOTE C/See §200.3*

81.40 Inter-Related Arts

Coordinator
K. AUSTIN

The Faculty of Fine Arts offers a programme in Inter-Related Arts for students wishing to focus their studies on more than two disciplines. Such students are advised to select courses from the list below in consultation with the Faculty co-ordinator.

60 BFA Major in Inter-Related Arts*

0-12	Inter-Related Arts electives
0-24	Department of Art. History elective credits
0-24	Department of Cinema and Photography: Film Studies elective credits, Film Animation C312[6], Film Production C231[6], Photography C200[6], C250[6]
0-24	Contemporary Dance electives chosen in consultation with the Dance Coordinator
0-24	Department of Music elective credits chosen in consultation with a programme adviser, Music
0-24	Department of Theatre elective credits chosen in consultation with a programme adviser, Theatre
0-24	Studio Art elective credits chosen from the Departments of Art Education and Art Therapy; Design; Painting and Drawing; Printmaking; Sculpture, Ceramics and Fibres

**Credits must be taken in a minimum of 3 fields of concentration with a maximum of 24 credits in any field.*

***Art C460 may be substituted for 6 credits in Studio Art or Art History.*

INRA C300 ***Inter-Related Arts Seminar*** (6 credits)
Prerequisite: Third-year standing* in the Major in Inter-Related Arts or written permission of the Coordinator of Inter-Related Arts. A forum for the consideration of theory and practice addressing the nature of relationships between the fine arts.
**fewer than 33 credits remaining in degree programme*

INRA C391 ***Independent Study I*** (3 credits)
Prerequisite: Third-year standing* and written permission of the Coordinator of Inter-Related Arts. A course of independent study in which the student explores the relationship between two or more fields of concentration. *NOTE C/See §200.3*
**fewer than 33 credits remaining in degree programme*

INRA C392 ***Independent Study II*** (3 credits)
Prerequisite: Inter-Related Arts C391 and written permission of the Coordinator of Inter-Related Arts. A student repeating Inter-Related Arts C391 registers for credit under Inter-Related Arts C392.

81.50 Art Education and Art Therapy

Chairman
L. SHERMAN, *Professor*

Associate Professors
M. EDWARDS
S. HORNER
D. PARISER
R. PARKER
G. ROSINE
E. SACCA

Assistant Professor
J. BYERS
C. MULLEN

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

78* **BFA Specialization in Art Education**
18 Art Education C300[6], C400[6], C430[6]
6 Fibres C240[6], C260[6], Ceramics C230[6]
12 Painting C200[6], Drawing C200[6]
6 Art History C244[6]
6 Art History elective**
18 Studio Art electives chosen in consultation with a programme adviser in Art Education
12 Drama in Education or Music

**With written permission of the Department of Art Education and Art Therapy, students may take an extra 6 credits from offerings of the Faculty of Fine Arts.*

***Art C460 may be substituted for the Art History elective.*

NOTE: Students applying to the Diploma in Art Education and for Québec Certification must, in addition, take Education C210.

60 **BFA Major in Art Education**
12 Art Education C300[6], C400[6]
6 Fibres C240[6], C260[6], Ceramics C230[6]
12 Art History electives*
30 Studio Art elective credits (Film Animation C312 may be substituted for 6 credits in Studio Art)

**Art C460 may be substituted for an Art History elective.*

NOTE: This programme is an alternative to the BFA Specialization in Art Education and does not lead directly to the Diploma in Art Education. Electives permit a wider choice in appropriate complementary areas in preparation for graduate study in areas such as art therapy, museum work, recreation, geriatrics and fine arts administration. Students wishing to qualify for the Diploma in Art Therapy should refer to entrance requirements in the Graduate Calendar which include 6 credits in Art Therapy and 18-24 credits in Psychology.

THE CERTIFICATE IN ELEMENTARY ART EDUCATION

The Department of Art Education offers a Certificate in elementary art education for the professional development of teachers. The programme is designed in accordance with the guidelines of the Quebec Ministry of Education and consists of studios, seminars, lectures, and a practicum.

The programme offers classroom teachers opportunities to acquire the knowledge and skills needed to implement the elementary art programme and to enrich the curriculum by relating art to other subject areas. Courses are scheduled in the late afternoon or evenings, both on and off campus for the convenience of teachers.

Admission Requirements

Entry to the programme requires that the candidate be legally qualified to teach either at the elementary or high-school level. The Faculty of Fine Arts may allow up to 12 *pro tanto* credits to students who have completed appropriate courses that have been applied to a previous degree or certificate.

30 **Certificate in Elementary Art Education**
6 Art Education C200[6]
6 Art C200[6]
6 Art Education C330[6]
12 Electives from other offerings within the Faculty of Fine Arts

Art Education:

ARTE C200 ***Orientation to Art Education*** (6 credits)
A studio workshop course of interest to teachers, recreation workers and others interested in applications of the visual arts. No previous art experience is required. Students are introduced to various art media including painting, collage construction, printing, and modelling, and helped to see the educational possibilities of these media. *NOTE A/See §200.3*
NOTE: Students who receive credits for this course may not take Art Education C201 for credit.

ARTE C201 ***Art in Early Childhood I*** (3 credits)
Prerequisite: Enrolment in the Specialization in Early Childhood, Major in Child Studies, or written permission of the Department of Art Education and Art Therapy. An introductory study of the art-making process in early childhood. This course is a studio workshop which investigates potential media and teaching approaches appropriate for the young child.
NOTE: Students who receive credit for this course may not take Art Education C200 for credit.

ARTE C202 ***Art in Early Childhood II*** (3 credits)
Prerequisite: Art Education C201. A continuation of Art Education C201.

ARTE C300* ***An Introduction to Art Education*** (6 credits)
Prerequisite: Eighteen credits in Studio Art and second-year standing** or written permission of the Department of Art Education and Art Therapy. A workshop-seminar course in which materials and art concepts are investigated and related to the teaching of art. Readings in the literature of Art Education are included.
**With permission of one of the Studio Art chairmen, this course may satisfy a studio art elective requirement in the student's degree programme, Major in Studio Art.*
***fewer than 66 credits remaining in degree programme.*

ARTE C301 ***Methodologies and Resources for the Teaching of Art History*** (3 credits)
Prerequisite: Six credits in Art History. This course deals with the methodologies, resources, and content for teaching art history in elementary and secondary schools. The course consists of lectures, museum seminars, and field trips.

ARTE C310 ***Art Education in the Museum*** (6 credits)
Prerequisite: Six credits in Art History. An examination of the role of art education in the museum and to the function of the museum in society. Fundamental problems in museum studies are considered in relation to the collection, preservation, exhibition and interpretation of art objects. The museum as an educational institution is studied in lectures, seminars, readings and field work. Topics include the educator's responsibilities in the planning and installing of exhibits, organizing docent and lecture programmes, and the preparing of audio-visual materials for the public.

ARTE C330 ***Supervised Practicum in Elementary Art Education*** (6 credits)
Prerequisite: Art Education C200, Art C200, and enrolment in the Certificate Programme in Art Education for Teachers. The course includes seminars which examine the role of art in the educational system, and the theoretical framework for the planning and implementation of art activities. Students design curriculum-units in art for the elementary level and teach these under supervision in a school setting. Teaching performance is evaluated.

ARTE 398 ***Special Topics in Art Education*** (3 credits)
Prerequisite: Written permission of the Department of Art Education and Art Therapy. A course which provides an opportunity for the study of specialized aspects of art education. Topics chosen for consideration vary from year to year. *NOTE C/See §200.3*

ARTE C400 ***Seminar and Practicum in Art Education*** (6 credits)
Prerequisite: Art Education C300, enrolment in the Specialization or Major in Art Education or written permission of the Department of Art Education and Art Therapy. The development of a philosophy of art education on the basis of studio experiences, readings and the observation of and participation in teaching experiences. This course includes weekly seminars and a practicum. *NOTE A/See §200.3*

ARTE C430* ***Multi-Media*** (6 credits)
Prerequisite: Eighteen credits in Studio Art and second-year standing** or written permission of the Department of Art Education and Art Therapy. An introduction to photography, super-8 film-making, video, and sound. The course deals with the practical and theoretical aspects of these media and explores their potential for the artist and art educator. *NOTE A/See §200.3*
**With permission of one of the Studio Art Department Chairmen, this course may satisfy a Studio Art elective requirement in the student's degree programme, Major in Studio Art.*
***fewer than 66 credits remaining in degree programme.*

ARTE 498 ***Special Topics in Art Education*** (3 credits)
Prerequisite: Written permission of the Department of Art Education and Art Therapy. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of art education. The topics chosen for consideration vary from year to year according to the instructor's field of specialization. *NOTE C/See §200.3*

Art Therapy:

Course in Art Therapy is intended as part preparation for graduate study in this area.

ATRP C300 ***An Introduction to Art Therapy*** (6 credits)
Prerequisite: Second-year standing* and written permission of the Department of Art Education and Art Therapy, Psychology C200 (or equivalent); Major in Art Education or twelve credits in Studio Art. Lectures, seminars and workshops which examine basic concepts of art therapy and some of their practical application.
**fewer than 66 credits remaining in degree programme*

81.60 Art History

Chairman
D. ANDRUS, *Associate Professor*

Professors
E.F. COOKE
W. SANDERSON

Associate Professors
J. BELISLE
H. GEORGE
R. GREENBERG
E. JAMES
L. LACROIX
S. PAIKOWSKY

Assistant Professor
C. MACKENZIE

Students are responsible for satisfying their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20

The superscript indicates credit value.

60* BFA Honours in Art History**

6 Art History C250[6]***
6 Art History 398[3], C480[6], 499[6]
6 Art History C495[6]
6 Art History C234[6], Art C200[6], or, if exempt 6 credits from Painting C200[6], Drawing C200[6]
36 Art History elective credits chosen in consultation with the Honours Adviser****

**Part-time students enrolled in the Honours programme in Art History must successfully complete a minimum of 12 credits during each Fall/Winter session in which they are enrolled.*

***Prospective Honours students must apply for entry to the programme after the completion of 30 credits and prior to the commencement of their last 30 credits of the BFA degree.*

****Students who have entered this programme prior to the Fall Session 1983 and who have not completed ARTH C240[6] must take ARTH C250.*

*****With permission of the Honours adviser, students may substitute credits outside the Department of Art History for six credits in Art History.*

60 BFA Major in Art History

30 Art History C250[6]*, Art History C339[6], C342[6], C343[6], C455[6]
6 Art History C234[6], or Art C200[6], or, if exempt, 6 credits from Painting C200[6], Drawing C200[6]
24 Art History electives selected in consultation with an assigned adviser

**Students who have entered this programme prior to the Fall Session 1983 and who have not completed ARTH C240[6] must take ARTH C250[6].*

60 BFA Major in Art History and Studio Art

6 Art History C250[6]*
6 Art History C234[6] or Studio Art elective
6 Art C200[6] or, if exempt, a Studio Art elective
24 Art History electives**
18 Studio Art electives chosen from studio courses offered by departments of: Design; Painting and Drawing; Printmaking; Sculpture, Ceramics and Fibres; and Photography from Cinema and Photography

**Students who have entered this programme prior to the Fall Session 1983 and who have not completed ARTH C240[6] must take ARTH C250[6].*

***Art C460 may be substituted for 6 credits in Art History.*

30 Minor in Archaeology

12 Art History C210[6], C310[6]
6 Art History C410[6], C415[6]
12 Electives chosen with the permission of the Archaeology Coordinator from Art History or appropriate courses in Anthropology, Chemistry, Classics, Geography, History, or Physics*

**Students completing these electives for the Minor in Archaeology from course offerings outside the Faculty and who wish to combine the Minor with a Major or Specialization in the Faculty of Fine Arts, may, with written permission of the Department of Art History, be granted exemption from 12 credits required from outside the Faculty.*

30 Minor in Art History

6 Art History C250[6]*
18 Art History C339[6], C342[6], C343[6], C455[6]
6 Art History elective

**Students who have entered this programme prior to the Fall Session 1983 and who have not completed ARTH C240[6] must take ARTH C250[6].*

30 Minor in Art History and Studio Art

6 Art History C250[6]*
6 Art C200[6] or, if exempt a Studio Art elective
6-12 Art History electives
6-12 Studio Art electives selected from the Departments of: Design; Painting and Drawing; Printmaking; Sculpture, Ceramics and Fibres

**Students who have entered this programme prior to the Fall Session 1983 and who have not completed ARTH C240[6] must take ARTH C250[6].*

ARTH C210 ***Principles of Archaeology*** (6 credits)
An introduction to archaeological methods and techniques, with examples drawn from the ancient civilizations of the Americas and the Mediterranean.
NOTE: Students who have received credit for Interdisciplinary Studies-Archaeology S333 or Archaeology-Interdisciplinary Studies S333 may not take this course for credit.

ARTH C220 ***The History of Design: Theory and Practice*** (6 credits)
Prerequisite: Enrolment in the Major in Design Art, or an Art History programme, or written permission of the Department of Art History. A consideration of design theory and practice, with emphasis on the inter-relationship of stylistic, socio-cultural and technical aspects. Examples are drawn from a broad spectrum of epochs and geographical areas, but particular attention is given to historical approaches that have importance for contemporary design.

ARTH C232 ***Introduction to Architecture and Sculpture*** (6 credits)
Enables the student to understand and appreciate great works in architecture and sculpture and to develop a discriminative understanding of three-dimensional form in design and in the architectural environment. The main types, styles, and techniques of these arts are explained and illustrated. To understand their significance, the student is encouraged to become familiar with great examples of these arts through pictorial reproductions, slides, models, museum visits, and field trips. *NOTE A/See §200.3*

ARTH C234 ***Materials and Methods of the Artist*** (6 credits)
Prerequisite: Enrolment in Honours in Art History, or Major in Art History, or Major in Art History and Studio Art. Through a series of special projects, this course familiarizes the student with some of the various materials, techniques, and other aspects of the artist's craft, with special emphasis being given to historical techniques. Lectures and studio work. *NOTE A/See §200.3*

ARTH C244 ***Introduction to the Arts in Canada*** (6 credits)
A history of the development of the arts in Canada from the seventeenth century to the present. Representative works in various media are studied in relation to their milieu. Introduction to research projects specific to the field. *NOTE A/See §200.3*

ARTH C244 ***Introduction de l'art au Canada*** (6 crédits)
Historique du développement des arts au Canada du dix-septième siècle à nos jours. Les oeuvres étudiées seront choisies en rapport à leur importance pour le milieu. Introduction aux problèmes de la recherche dans le domaine. *NOTE A/Voir §200.3*

ARTH C249 ***Canadian Sculpture and Architecture*** (6 credits)
A study of the more important developments of Canadian architecture and sculpture, from indigenous forms to contemporary works. *NOTE A/See §200.3*

ARTH C250 ***Principles and Practices of Art History*** (6 credits)
An introduction to the discipline of Art History based upon a study of the formal characteristics of the work of art, its historical context and the methods employed in its analysis.

ARTH C250 ***Théories et méthodes de l'histoire de l'art*** (6 crédits)
L'analyse des caractéristiques formelles des oeuvres d'art, les conditions historiques de production artistique, et l'examen des méthodes utilisés en histoire de l'art sont les trois volets qui constituent ce cours de base.

ARTH C310 ***Applied Archaeology*** (6 credits)
Prerequisite: Art History C210. Students apply theoretical archaeological methods to the excavation of a prepared site and report on the excavation and their findings.
NOTE: Students who have received credit for Art History C410 must have written permission from the Archaeology Coordinator to register for this course.

ARTH C320 ***The History of Ceramics*** (6 credits)
Prerequisite: Enrolment in the Major in Ceramics, or an Art History programme, or written permission of the Department of Art History. An examination of the development and uses of ceramics as an art form or a medium in Western and Eastern ceramic traditions. *NOTE A/See §200.3*

ARTH C322 ***The History of Fibres*** (6 credits)
Prerequisite: Enrolment in the Major in Fibres, or an Art History programme, or written permission of the Department of Art History. An examination of the development and uses of fibre as an art form or a medium in Western and Eastern textile traditions. *NOTE A/See §200.3*

ARTH C338 ***Art in the Ancient Near East*** (6 credits)
An introduction to the art, architecture, and minor arts in the ancient Near East and Aegean, placing special emphasis upon Egypt, Mesopotamia, Crete, and the Cycladic Islands. *NOTE A/See §200.3*

ARTH C339 ***Art and Architecture in Ancient Greece and Rome*** (6 credits)
An introduction to the art and architecture of the Mycenaean, Greek, Etruscan, and Roman civilizations. *NOTE A/See §200.3*

ARTH C342 ***The Renaissance in Italy*** (6 credits)
A survey of painting, sculpture, and architecture in Italy during the fifteenth and sixteenth centuries. *NOTE A/See §200.3*

ARTH C343 ***The History of Nineteenth-Century Art*** (6 credits)
Beginning with the age of neo-classicism, this course examines Romanticism, Realism, Impressionism, Neo-Impressionism, and other nineteenth-century European movements. *NOTE A/See §200.3*

ARTH C343 ***Histoire de l'art au XIXe siècle*** (6 crédits)
Étude de l'évolution de l'art européen au XIXe siècle depuis le néo-classicisme en passant par le romantisme, le réalisme, l'impressionnisme, et le néo-impressionnisme et les autres mouvements marquants. *NOTE A/Voir §200.3*

ARTH C346 ***History of Modern Architecture*** (6 credits)
An examination of the major building styles from the mid-eighteenth century through the twentieth century. Special emphasis on the contributions of individual architects. *NOTE A/See §200.3*

ARTH C347 ***History of Drawing*** (3 credits)
Prerequisite: Six credits in Art History. The history of drawing in Western art. Topics examined include the working drawing, the emergence of drawing as an independent art form, the historical role of drawing in the education of the artist, and the formal qualities of drawing which distinguish it from other modes of visual expression.

ARTH C348 ***History of Printmaking*** (3 credits)
Prerequisite: Six credits in Art History. The development and role of the print in the history of art. Topics include the evolution of the various techniques of printmaking, the educational function of the print, the formal qualities of the print which distinguish it from other means of visual expression, and its emergence as an independent art form.

ARTH 398 ***Special Topics in Art History*** (3 credits)
Prerequisite: Twelve credits in Art History or written permission of the Department of Art History. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of Art History. *NOTE C/See §200.3*

ARTH C410 ***Field Archaeology*** (6 credits)
Prerequisite: Art History C210 and C310. Supervised participation at a site approved by the Archaeology Coordinator. Students submit a paper concerning their participation in the excavation.

ARTH C415 ***Topics in Archaeology*** (6 credits)
Prerequisite: Art History C210 and C310. A course for advanced students, with subject matter varying according to the interests of the instructor.

ARTH C420 ***Architectural Principles and Practice in the Western Tradition*** (6 credits)
Prerequisite: Twelve credits in Art History, or written permission of the Department of Art History. An examination of the interrelationship between style, structure, and meaning in selected periods of the History of Architecture. Consideration is also given to the social and aesthetic factors involved.

ARTH C425 ***Architecture in Canada*** (6 credits)
Prerequisite: Six credits in Art History or written permission of the Department of Art History. An examination of the origins and evolution of regional and national architectural forms from New France to the present. The influence of prevailing international theories and styles is considered.

ARTH C425 ***L'architecture au Canada*** (6 crédits)
Préalable: Six crédits en histoire de l'art, ou la permission écrite du Département d'histoire de l'art. Survol de l'évolution de l'architecture régionale et nationale depuis la Nouvelle-France jusqu'à nos jours. L'influence des théories et des styles internationaux y est examinée.

ARTH C426 ***Art in Canada Before the 1930's*** (6 credits)
Prerequisite: Six credits in Art History or written permission of the Department of Art History. A study of painting, sculpture and the decorative arts from New France until the emergence of Modernism. Emphasis is placed upon prevailing regional and national concerns contributing to the character of art in Canada. Where relevant, attention is given to European and American influences.

ARTH C427 ***Art in Canada Since the 1930's*** (6 credits)
Prerequisite: Six credits in Art History or written permission of the Department of Art History. An examination of modern art in Canada within the context of the cultural, theoretical and formal issues that have shaped its development.

ARTH C439 ***Iconography*** (6 credits)
Prerequisite: Twelve credits in Art History. An examination of recurring visual symbols in Western Art which are derived from Classical or Christian literature.

ARTH C440 ***Early Christian and Byzantine Art*** (6 credits)
Prerequisite: Six credits in Art History or written permission of the Department of Art History. A history of Christian art and architecture from their late Roman beginnings through the sixth century

in Western Europe to the fall of Byzantium in 1453 in the East. The genesis and growth of major iconographic themes and their changing stylistic expressions are considered in architecture, mural decoration, manuscript illumination, and the liturgical arts.

ARTH C441 ***The History of Medieval Art*** (6 credits)
Prerequisite: Six credits in Art History. An examination of the arts of the Middle Ages, beginning with the Carolingian Renaissance. Special emphasis is given to the architecture and sculpture of the Romanesque monasteries and the great Gothic cathedrals, as well as to the deluxe manuscripts of the French Court. *NOTE A/See §200.3*

ARTH C442 ***The Renaissance in Northern Europe*** (6 credits)
Prerequisite: Six credits in Art History. An investigation of the development of art in France, Flanders, Germany, and Austria in the fifteenth and sixteenth centuries. *NOTE A/See §200.3*

ARTH C443 ***History of Baroque and Rococo Art and Architecture*** (6 credits)
Prerequisite: Six credits in Art History. An examination of the major achievements in Dutch, English, Flemish, French, Italian, Spanish, German, and Austrian art and architecture in the seventeenth and eighteenth centuries. *NOTE A/See §200.3*

ARTH C445 ***American Art and the European Background*** (6 credits)
Prerequisite: Six credits in Art History. A survey of American Art from earliest colonial times into the early twentieth century, viewed against the background of those European developments which have significantly affected it. *NOTE A/See §200.3*

ARTH C450 ***The Decorative Arts*** (6 credits)
Prerequisite: Six credits in Art History. An examination of selected aspects of the Decorative Arts, including furniture, glass, pottery and porcelain, metals and metal alloys, and textiles.

ARTH C451 ***English Art 1750-1910*** (6 credits)
Prerequisite: Six credits in Art History or written permission of the Department of Art History. A study of English art from the beginning of Romanticism to the first Post-Impressionist exhibition in London. The primary emphasis is on painting, its theoretical basis, and its relationship to Continental art.

ARTH C455 ***Western Art 1905-1939*** (6 credits)
Prerequisite: Six credits in Art History. A survey of significant avant-garde art from the first Fauve exhibition to the beginning of World War II. Topics for discussion include the new visual forms and media, theoretical issues posed by the avant-garde and the relationship of avant-garde art to contemporaneous society and tradition. *NOTE A/See §200.3*

ARTH C455 ***L'Art en Occident de 1905 à 1939*** (6 crédits)
Préalable: Six crédits en histoire de l'art. Présentation de l'art d'avant-garde depuis la première exposition fauviste jusqu'au début de la Deuxième Guerre mondiale. Les nouvelles formes visuelles, les nouveaux médias, les problèmes théoriques posés par l'avant-garde, et les rapports avec la société contemporaine et la tradition sont parmi les sujets étudiés. *NOTE A/Voir §200.3*

ARTH C456 ***Art of the Americas*** (3 credits)
Prerequisite: Six credits in Art History or written permission of the Department of Art History. An examination of the art and architecture of selected indigenous cultures of the Americas, emphasizing their place in an aesthetic and art historical tradition.

ARTH C458 ***Non-Western Art*** (3 credits)
Prerequisite: Six credits in Art History or written permission of the Department of Art History. An examination of the art and architecture of selected non-Western cultures, emphasizing their place in an aesthetic and art historical tradition.

ARTH C459 ***Western Art Since 1940*** (6 credits)
Prerequisite: Six credits in Art History. An examination of recent developments in Western Art. Topics for discussion include the emergence of New York as a centre of contemporary art, the relationship of post World War II European art to that of North America, the generation of new art forms, the development of multi-media works, and the nature and role of criticism.

ARTH C459 ***L'art occidental depuis 1940*** (6 crédits)
Préalable: Six crédits en histoire de l'art. Examen des nouveaux faits survenus récemment dans l'art occidental. Les sujets traités comprennent l'émergence de New York comme centre d'art contemporain, les rapports entre l'art européen d'après la Deuxième Guerre mondiale et celui de l'Amérique du Nord, l'apparition de nouvelles formes d'art, la création d'oeuvres multi-disciplinaires ainsi que la nature et le rôle de la critique.

ARTH C480 ***Sources and Influences in Art History*** (6 credits)
Prerequisite: Twelve credits in Art History. An examination and discussion by students of selected aspects of Art History. The areas chosen for consideration vary from year to year according to the instructor's field of specialization. All students are required to undertake research projects and to submit papers based on their investigations. *NOTE A/See §200.3*

ARTH C484 ***Methodology and Art History*** (6 credits)
Prerequisite: Eighteen credits in Art History. A course for advanced students to consider Art History from the perspective of a particular method focusing on its theory and practice.

ARTH C495 ***Honours Essay*** (6 credits)
Prerequisite: Third-year* standing in the Honours programme in Art History. Students are required to prepare a research paper under the supervision of a faculty member.
**fewer than 33 credits remaining in degree programme*

ARTH 499 ***Special Topics in Art History*** (6 credits)
Prerequisite: Eighteen credits in Art History and written permission of the Department of Art History. A course for advanced students which provides for the study of limited and more specialized areas of Art History. The areas chosen for study vary from year to year according to the instructor's field of specialization. All students are required to conduct research on selected aspects of the course topic.
NOTE A,C/See §200.3

81.70 Cinema and Photography

Chairman
G. SZILASI, *Assistant Professor*

Associate Professors
T. GIBSON
A. HERMAN
J. LOCKE
T. WAUGH

Assistant Professors
M. FALSETTO
J. LEVITIN
M. MORTON
K. TWEEDIE

For detailed information regarding procedures for admission to the Cinema programmes, potential students should contact the Department of Cinema and Photography.

All students who have been accepted into Cinema programmes must contact the Department of Cinema and Photography for an appointment with an academic adviser prior to registration.

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.

The superscript indicates credit value.

66 BFA Specialization in Film Production

NOTE: It is strongly recommended that students in the Specialization in Film Production have, or acquire, a knowledge of French.

42* Film Studies C211[6], C212[6], C311[3], Film Production C231[6], C332[6], C337[6], C339[3], C432[6]

9 Film Production C334[3], C335[3], C341[3], C438[3], C439[3], C440[3], C441[3], Photography C200[6]

9 Film Studies electives, excluding Film Studies C200**

6 Film Production or Film Studies electives, excluding Film Studies C200**

66 BFA Specialization in Film Studies

NOTE: It is strongly recommended that students in the Specialization in Film Studies have, or acquire, a knowledge of French.

36* Film Studies C211[6], C212[6], C311[3], C312[3], C321[6], C322[6], Film Production C231[6]

6 Film Studies C314[3], C315[3], C418[3], C419[3]***

12 Film Studies electives, excluding Film Studies C200**, Film Production C334[3], C341[3], C441[3]

6 Film Studies C414[3], C415[3], C416[3], C417[3], C418[3], C419[3], C422[3], C423[3], C424[3]

6 400 level Film Studies electives

48 BFA Major in Cinema

Core

12 Film Studies C211[6], C212[6]

6 Cinema electives**

Option A—Film Production

18 Core

6 Film Production C231[6]

12 Film Production C331[6] and Film Production electives

or

Film Production C332[6] and C337[6]

6 Film Studies C322[6]

6 Cinema electives**

Option B—Film Animation

18 Core

18 Film Animation C312[6], C313[6], C414[6]

6 Cinema or Studio Art electives

6 Film Studies C323[3] and Cinema elective**

In specific cases and with the written permission of the Film Animation Coordinator, Film Production C231[6] may be substituted for Film Animation C414[6].

Option C—Film Studies

18 Core

6 Film Studies C322[6]

18 Film Studies electives, excluding Film Studies C200[6]**

6 Cinema elective

48 BFA Major in Photography

30 Photography C200[6], C250[6], C300[6], C310[6], C320[6]

6 Photography electives

12 Visual Arts electives

30 Minor in Cinema

12 Film Studies C211[6], C212[6]

18 Film Studies electives**. (With the written permission of the Department of Cinema and Photography, introductory level Film Animation or Film Production courses selected in consultation with the Department, may be substituted.)

This is a very limited enrolment programme for students who want to have some access to Film Production and Film Animation courses.

This Minor cannot be combined with the Minor in Film Animation to form a Double Minor programme.

30 Minor in Film Animation*
12 Film Animation C312[6], CC313[6]
3 Film Studies C323[3]
6 Film Studies C212[6]
9 Cinema or Studio Art electives chosen in consultation with the Coordinator of Film Animation

This Minor cannot be combined with the Minor in Cinema to form a Double Minor programme.

24 Minor in Film Studies
12 Film Studies C200[6], C211[6], C212[6]
12 Film Studies electives**

This minor cannot be combined with a second Faculty of Fine Arts Minor to form a BFA Double Minor programme. It is intended for students outside the Faculty of Fine Arts. Students in Communication Studies Department degree programmes must have written permission of their department to enter this programme.

24 Minor in Photography
12 Photography C200[6], C250[6]
6 Photography C300[6], C310[6], C320[6]
6 Visual Arts electives

NOTES:

**Film Studies C211 and C212 should be taken as part of the first 30 credits.*

***In both the Specialization in Film Studies and the Major in Cinema, Français C373, and/or up to 12 credits in Communication Studies (listed in §81.70.2) may be substituted for Film Studies elective credits and must be considered as Film Studies or Cinema electives for degree purposes. In both the Minor in Cinema and the Minor in Film Studies, Français C373 or up to 6 credits in Communication Studies (listed in §81.70.2) may be substituted for Film Studies credits for degree purposes.*

****Communication Studies C316 may be substituted for 3 credits in Film Studies and must be considered as Film Studies credits for degree purposes.*

81.70.1 Admission to Film Production Programmes

Successful applicants to the Specialization in Film Production and the Major in Cinema, Option A, Film Production are accepted into the Major in Cinema with no option specified. After completion of their first 30 credits in the programme, these students may apply for transfer into a concentration in Film Production.

Film Studies:

FMST C200 ***Introduction to Film Studies*** (6 credits)
A survey acquainting the student with the art of the film. The technical and critical terminology of film studies is discussed. Popular literature on film, such as reviews, is analyzed and the more specialized film literature is introduced. Directors whose films are usually viewed include Bergman, Eisenstein, Fellini, Ford, Hitchcock, Kurosawa, Lubitsch, Keaton, and Welles. Weekly screenings. *NOTE A/See §200.3*

FMST C211* ***History of Film*** (6 credits)
A study of the history of film, from its beginning to the 1950's. Changes in the forms, functions, aesthetics, and technology of film are dealt with through the examination of individual works seen in a chronological sequence. Weekly screenings. *NOTE A/See §200.3*
**Students in Cinema programmes who require Film Studies C211 should complete the course as part of their first 30 credits.*

FMST C211* ***L'histoire du cinéma*** (6 crédits)
Historique du cinéma, de ses débuts aux années 50. Les changements dans les formes, les fonctions, l'esthétique, et les aspects techniques du cinéma y sont traités par l'examen des oeuvres individuelles vues dans un ordre chronologique. Visionnements hebdomadaires. *NOTE A/See §200.3*
**Les étudiants inscrits aux programmes en cinéma devraient suivre Film Studies C211 parmi les 30 premiers crédits si le cours figure au programme.*

FMST C212* ***Film Aesthetics*** (6 credits)
A study of the aesthetics of film. Topics include film criticism, theories about the fundamental elements of film, and comparisons between films which do not depend on their date of production. Problems of film description, interpretation, and evaluation are discussed. Weekly screenings. *NOTE A/See §200.3*
**Students in Cinema programmes who require Film Studies C212 should complete the course as part of their first 30 credits.*

FMST C311 ***Montage Aesthetic*** (3 credits)
Prerequisite: Film Studies C212. An intensive study of montage as an element of film style. Beginning with the work of D.W. Griffith, developments in film editing are followed through French Avant-Garde and Russian films of the 1920's to contemporary film. Weekly screenings.

FMST C312 ***Moving Camera Aesthetic*** (3 credits)
Prerequisite: Film Studies C212. An intensive study of camera movement as an element of film style. Consideration is given to relations between long takes, deep focus cinematography, and camera movement, as well as to the role of camera movement in creating the significations of film. Films by

Murnau, Renoir, Welles, Ophuls, and Snow are included among those viewed and discussed. Weekly screenings.

FMST C313 ***Film Comedy I*** (3 credits)
Prerequisite: Second-year standing.* An introduction to film comedy in the silent and sound eras. The visual and verbal sources of comedy are analyzed through the study of films ranging from Mack Sennett's and Buster Keaton's to Woody Allen's and Jacques Tati's. Weekly screenings.
**fewer than 66 credits remaining in degree programme.*

FMST C314 ***English-Canadian Film*** (3 credits)
A survey of English-Canadian film from the earliest surviving works to the present. Topics include fictional, documentary, animated, and experimental film. The role of the National Film Board is discussed. Weekly screenings. *NOTE A/See §200.3*

FMST C315 ***Le cinéma québécois*** (3 crédits)
Revue des films québécois, mettant principalement l'accent sur les oeuvres contemporaines. Les aspects culturels et politiques particuliers de ces films sont examinés. La structure de l'industrie cinématographique du Québec et le rôle de l'Office National du Film y sont traités particulièrement. Visionnements hebdomadaires. *NOTE A/Voir §200.3*

FMST C318 ***Experimental Film*** (3 credits)
Prerequisite: Second-year standing.* An examination of experimental film emphasizing developments from the late forties to the present. The New American Cinema is considered in relation to other North American and European experimental cinemas, and examples of the historical antecedents of recent experimental films are viewed and discussed. Weekly screenings.
**fewer than 66 credits remaining in degree programme*

FMST C321 ***The Art of Film Directors*** (6 credits)
Prerequisite: Film Studies C211 or second-year standing*. A concentrated study of the work of several major directors from different periods in film history. Each director's work is examined in detail with representative films from distinct periods. The films are considered in terms of thematic and stylistic consistency and variation as well as biographical, social, and political factors. Weekly screenings. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme*

FMST C322 ***Contemporary Film*** (6 credits)
Prerequisite: Film Studies C211 or second-year standing*. This course begins with the New Wave in France and the resurgence of European film in the late 1950's and includes recent trends in documentary, Japanese, and Underground film. The films are studied in the context of major philosophical, political, and cultural developments of the period, as well as contemporaneous developments in other art forms. Weekly screenings. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme*

FMST C323 ***History of Animated Film*** (3 credits)
Prerequisite: Enrolment in the Major in Cinema, Option B Film Animation, Minor in Film Animation, or second-year standing*. A survey of animated film from the first decade of the twentieth century to the present. Styles of animation ranging from abstract experimental film of the 1920's, to the Disney Studio, to computer animation are viewed and discussed. The contribution of the National Film Board of Canada and particularly that of Norman McLaren is considered. Weekly screenings. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme*

FMST C323 ***Histoire du cinéma d'animation*** (3 crédits)
Préalable: Inscription à la majeure, option B, Cinéma d'animation, la mineure en cinéma d'animation, ou niveau de scolarité de la deuxième année*. Aperçu général du film d'animation depuis la première décennie du vingtième siècle, jusqu'à nos jours. Les styles d'animation, du film expérimental abstrait des années 20 au Studio Disney, et à l'animation par ordinateur, sont présentés et étudiés. Est traité aussi l'apport de l'Office National du Film, en particulier celui de Norman McLaren. Visionnements hebdomadaires. *NOTE A/See §200.3*
**moins de 66 crédits à obtenir dans un programme conduisant à un diplôme*

FMST C324 ***Film Script Analysis*** (3 credits)
Prerequisite: Second-year standing* and six credits in Film Studies. A study of the film script both as a basis for the construction of a film and as an identifiable component of film with its own history and value. Examples from film history as well as the work of major scriptwriters are analyzed, in their written form and through film screenings. The stages of script development from story idea through shooting script are discussed.
**fewer than 66 credits remaining in degree programme*

FMST C324 ***Analyse de scénarios*** (3 crédits)
Préalable: Niveau de scolarité de la deuxième année* et six crédits en études cinématographiques. Étude de scénarios sur deux plans: d'une part canevas du film et d'autre part élément identifiable ayant une histoire et une valeur propre. Analyse d'exemples tirés de l'histoire du cinéma et de l'oeuvre des plus grands scénaristes, à l'aide des textes eux-mêmes et de visionnements. Les diverses étapes

de rédaction du scénario depuis l'idée de départ jusqu'au découpage sont étudiées.
**moins de 66 crédits à obtenir dans un programme conduisant à un diplôme*

FMST C327 ***Third World Film*** (3 credits)
Prerequisite: Second-year standing.* A survey of Third-World films seen in relation to their cultural, political, and aesthetic environment. Films are selected from areas such as Latin America, the Caribbean, Africa, the Middle East, South and East Asia. Weekly screenings.
**fewer than 66 credits remaining in degree programme*

FMST C327 ***Cinéma du Tiers-Monde*** (3 crédits)
Préalable: Niveau de scolarité de la deuxième année.* Revue des films du Tiers-Monde dans leur cadre culturel, politique, et esthétique. Les films choisis viennent d'Amérique latine, des Antilles, d'Afrique, du Moyen-Orient, d'Asie du Sud et de l'Est. Visionnements hebdomadaires.
**moins de 66 crédits à obtenir dans un programme conduisant à un diplôme*

FMST C328 ***Nonfiction Film Since 1956*** (3 credits)
Prerequisite: Second-year standing*. A cross-cultural survey of contemporary developments in the documentary film. The course begins with the precursors of *cinéma-direct* in North America and Europe during the fifties, and extends through the most recent applications of *cinéma-direct* in the emerging cinemas of the Third World. Emphasis is placed on both the artistic achievement and the theoretical, cultural and political context of the nonfiction film during this period of technological and aesthetic transition. Weekly screenings.
**fewer than 66 credits remaining in degree programme*

FMST C328 ***Le documentaire depuis 1956*** (3 crédits)
Préalable: Niveau de scolarité de la deuxième année*. Revue pan-culturelle des progrès actuels du documentaire. Le cours va de l'étude des précurseurs du cinéma direct en Amérique du Nord et en Europe durant les années 50 aux plus récentes applications chez les cinémas naissants des pays du Tiers-Monde. L'accent est mis sur l'aspect artistique et le contexte théorique, culturel et politique du documentaire durant cette période de transition technologique et esthétique. Visionnements hebdomadaires.
**moins de 66 crédits à obtenir dans un programme conduisant à un diplôme*

FMST C329 ***Women and Film*** (3 credits)
Prerequisite: Film Studies C211, or second-year standing*. An examination of films made by women, film criticism written by women, and the portrayal of women in films. These topics are considered within the context of film history and with an emphasis on their relation to ideas in contemporary feminist theory. Weekly screenings. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme*

FMST 398 ***Topics in National Cinemas*** (3 credits)
Prerequisite: Second-year standing.* An examination of films as reflections of national cultures. Films by a range of directors representing one or several national groupings such as Japan, Brazil, Eastern Europe, Great Britain, or contemporary West Germany are discussed in the context of their aesthetic, cultural, and political aspirations. Weekly screenings.
**fewer than 66 credits remaining in degree programme*

FMST 398 ***Sujets dans les cinémas nationaux*** (3 crédits)
Préalable: Niveau de scolarité de la deuxième année*. Le cinéma reflet des cultures nationales. Les films de nombreux réalisateurs représentant un ou plusieurs regroupements nationaux comme le Japon, le Brésil, l'Europe de l'Est, la Grande-Bretagne, ou l'Allemagne de l'Ouest sont analysés à la lumière des aspirations esthétiques, culturelles, et politiques qu'ils véhiculent. Visionnements hebdomadaires.
**moins de 66 crédits à obtenir dans un programme conduisant à un diplôme*

FMST C411 ***Advanced Studies in Film Genres*** (3 credits)
Prerequisite: Film Studies C211. Film Studies C322 or Communication Studies C310. An intensive analysis of one or two film genres, which assumes previous experience in film genre studies. The genre is discussed in terms of its structural characteristics and the ways in which it is a product of specific social situations. Weekly screenings.

FMST C413 ***Film Comedy II*** (3 credits)
Prerequisite: Film Studies C313 or Communication Studies C310 or written permission of the Department of Cinema and Photography. A continuation of Film Studies C313 on a more advanced level. Emphasis is placed on theoretical aspects of film comedy and the films of several major comedy directors. Weekly screenings.

FMST C414 ***Seminar in Film Directors I*** (3 credits)
Prerequisite: Eighteen credits in Film Studies and written permission of the Department of Cinema and Photography. A seminar for advanced students which provides for more concentrated study of the work of specific film directors. The director or directors whose films are chosen for study varies from year to year according to the instructor's field of specialization. *NOTE C/See §200.3*

FMST C415 ***Seminar in Film Directors II*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A student repeating

Film Studies C414 registers for credit under Film Studies C415 provided the subject matter is different.

FMST C416 ***Seminar in Problems in Film History I*** (3 credits)
Prerequisite: Eighteen credits in Film Studies and written permission of the Department of Cinema and Photography. A seminar for advanced students which provides for the study of limited and more specialized areas of film history. The areas chosen for study vary from year to year according to the instructor's field of specialization. *NOTE C/See §200.3*

FMST C417 ***Seminar in Problems in Film History II*** (3 credits)
Prerequisite: Eighteen credits in Film Studies and written permission of the Department of Cinema and Photography. A student repeating Film Studies C416 registers for credit under Film Studies C417 provided the subject matter is different.

FMST C418 ***Seminar in English-Canadian Film*** (3 credits)
Prerequisite: Film Studies C314, or Communication Studies C316 with written permission of the Department of Cinema and Photography. A seminar in which selected aspects of English-Canadian Film are examined and discussed. The areas chosen for study vary from year to year according to the instructor's field of specialization.

FMST C419 ***Séminaire sur le cinéma québécois*** (3 crédits)
Préalable: Film Studies C315, ou Communication Studies C316 avec permission écrite du département de Cinema et Photography. Un séminaire dans lequel des aspects sélectifs du cinéma québécois sont analysés et discutés. Les sujets d'étude choisis varient d'année en année selon la spécialisation de l'instructeur.

FMST C422 ***Seminar in Film Theory and Criticism*** (3 credits)
Prerequisite: Film Studies C212 and written permission of the Department of Cinema and Photography. Theories including those of Sergei Eisenstein and André Bazin are studied both as explanations of the effects of films and as foundations for film criticism. The relation of contemporary theoretical writings, such as those in film semiology, to film criticism is discussed. Weekly screenings.

FMST C423 ***Seminar in Comparative Stylistic and Formal Analysis*** (3 credits)
Prerequisite: Film Studies C422 and written permission of the Department of Cinema and Photography. An intensive course in the analysis of film style. Films are examined using an analytical projector in order to discover their formal and thematic structures. The contribution of cinematographers, editors, scriptwriters, directors, and performers to the development of a style are discussed. Weekly screenings.

FMST C424 ***Seminar in Film Narrative*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. An examination of conventions of film narrative from a theoretical and historical point of view. Innovations in narrative structure are discussed, and consideration is given to the origin, development, and transformation of narrative traditions in their cultural and aesthetic context.

FMST C425 ***Professional Internship*** (6 credits)
Prerequisite: Second-year standing* and enrolment in the Cinema Major Option C, Film Studies or Specialization in Film Studies. A Film Studies student who has been employed for not less than 500 hours within the same calendar year in film research, archival work, editing a film publication, or in writing film criticism, may apply for 6 credits on the understanding that the Department must be satisfied that the work was done under the joint supervision of a qualified professional and a full-time Cinema Faculty member. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme.*

FMST C428 ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course of independent study in which the student may explore a specific area of Film Studies.

FMST C429 ***Independent Studies II*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A student repeating Film Studies C428 registers for credits under Film Studies C429 provided the subject matter is different.

FMST 498 ***Special Topics in Film Studies I*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film studies. *NOTE A,C/See §200.3*

Film Animation:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.70.3

FMAN C312 ***Animation I*** (6 credits)
Prerequisite: Enrolment in the Major in Cinema, Option B, Film Animation; Minor in Film Animation;

or written permission of the Department of Cinema and Photography, with either Film Production C231 or 6 credits in a studio art course. A studio course introducing the theory and practice of film animation. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

FMAN C313 ***Animation II*** (6 credits)
Prerequisite: Film Animation C312 and written permission of the Department of Cinema and Photography. A continuation on a more advanced level of Film Animation C312. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

FMAN C414 ***Animation III*** (6 credits)
Prerequisite: Film Animation C313 and C323, and written permission of the Department of Cinema and Photography. A continuation on a more advanced level of Film Animation C313. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing and other materials.

FMAN C445 ***Professional Internship*** (6 credits)
Prerequisite: Second-year standing* in the Major in Cinema, Option B, Film Animation and written permission of the Department of Cinema and Photography. A Film Animation student who has been employed within the film industry for not less than 500 hours within the same calendar year may apply for 6 credits on the understanding that the Department of Cinema and Photography must be satisfied that the work was done under the joint supervision of a qualified professional and a full-time Cinema Faculty member. *NOTE A/See §200.3.*
**fewer than 66 credits remaining in degree programme.*

FMAN C448 ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course of independent study in which the student explores a specific area of Film Animation. *NOTE A,C/See §200.3*

FMAN C449 ***Independent Study II*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A student repeating Film Animation C448 registers for credit under Film Animation C449 provided the subject matter is different. *NOTE A/See §200.3*

FMAN 498 ***Special Topics in Film Animation I*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film animation. *NOTE A,C/See §2003.*

Film Production:

NOTE: A student may register for only one course in which films are produced as a course requirement during each academic session. See §81.70.3.

FMPR C231 ***Filmmaking I*** (6 credits)
Prerequisite: Enrolment in a Cinema programme and Film Studies C211 or C212, previously or concurrently or written permission of the Department of Cinema and Photography. An introductory course in the theory and practice of filmmaking. This course stresses the individual student's creative efforts in producing films in Super 8. Lecture and laboratory. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing and other materials.

FMPR C331 ***Filmmaking Studio I*** (6 credits)
Prerequisite: Enrolment in the Major in Cinema, Option A, Film Production and Film Production C231 and written permission of the Department of Cinema and Photography. An intermediate course in the theory and practice of filmmaking, emphasizing the creative possibilities available when 16mm lip sync equipment is not used. Formats include 16mm with wild sound, Super 8 with wild sound or with double system or single system lip sync sound, and silent 16mm or Super 8. Students work individually or as small crews, depending on the project and the format.
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

FMPR C332 ***Filmmaking II*** (6 credits)
Prerequisite: Second-year standing* in the Specialization in Film Production or the major in Cinema, Option A, Film Production; Film Production C231 and Film Production C337, previously or concurrently; and written permission of the Department of Cinema and Photography. An intermediate course in the theory and practice of filmmaking introducing lip-sync 16mm production. Topics emphasized include the creative possibilities of lip-sync 16mm, the development of ideas for films, and the preparation of these ideas for production, budgeting, production planning, and working with a film crew. Students participate in a number of productions and assume a range of roles while beginning to develop their area of specialization within the production team. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing and other materials.
**fewer than 66 credits remaining in degree programme*

FMPR C334 ***Problems and Methods of Film Production and Distribution*** (3 credits)
Prerequisite: Film Production C231. Topics include organizing a film project, financial aspects of film

production and distribution, legal problems, film laboratory procedures, and postproduction operations. *NOTE A/See §200.3*

FMPR C335 ***Acting and Directing Acting for the Screen*** (3 credits)
Prerequisite: Either Film Production C332, previously or concurrently, or six credits in Theatre Performance; and written permission of the Department of Cinema and Photography. A studio course for Cinema and Theatre students which explores directing and performing for film primarily through exercises recorded on video for analysis. Both performers and directors examine acting and directing acting for the camera through such topics as role preparation, character development, and performance continuity. *NOTE A/See §200.3*

FMPR C337 ***Technical Aspects of Filmmaking*** (6 credits)
Prerequisite: Enrolment in the Specialization in Film Production or the Major in Cinema, Option A, Film Production; and Film Production C332 concurrently and written permission of the Department of Cinema and Photography. Creative and experimental exercises in cinematography, sound, and other components of filmmaking. The complex technology of filmmaking is emphasized as forming a basis for the creative use of the medium. *NOTE A/See §200.3*

FMPR C338 ***Technical Aspects for Filmmaking Studio and Animation*** (3 credits)
Prerequisite: Film Production C331 or Film Animation C313, previously or concurrently, and written permission of the Department of Cinema and Photography. A course in specialized techniques of cinematography, non-sync sound, and graphic and photographic reproduction on film for Filmmaking Studio and Animation students. Creative and experimental exercises utilizing Bolex and advanced Super 8 cameras, the optical printer, sound and editing equipment, the Oxberry animation stand, and techniques such as filtration, titling, and in camera effects.

FMPR C339 ***Montage in Filmmaking*** (3 credits)
Prerequisite: Film Production C332, previously or concurrently, and written permission of the Department of Cinema and Photography. Fiction and nonfiction film-editing, emphasizing dynamic and continuity cutting and cutting-room techniques. Activities include editing the image in synchronized double system, cutting music and sound effects, preparation for and supervision of the rerecording. *NOTE A/See §200.3*

FMPR C341 ***Writing for Film*** (3 credits)
Prerequisite: Film Production C231 and written permission of the Department of Cinema and Photography. An introduction to writing for film, with special emphasis on the relation of the script to filmmaking. Students are expected to submit work of their own for discussion, analysis, and possible production in filmmaking courses. *NOTE A/See §200.3*

FMPR C431 ***Filmmaking Studio II*** (6 credits)
Prerequisite: Film Production C331, enrolment in the Major in Cinema, Option A, Film Production and written permission of the Department of Cinema and Photography. A continuation of Film Production C331.
NOTE: Students are required to bear the cost of film stock, processing, printing and other materials.

FMPR C432 ***Filmmaking III*** (6 credits)
Prerequisite: Third-year standing* in the Specialization in Film Production, Film production C332, and written permission of the Department of Cinema and Photography. A continuation of Film Production C332, with students working on more advanced filmmaking projects. *NOTE A/See §200.3*
NOTE: Students are required to bear the cost of film stock, processing, printing and other materials.
**fewer than 36 credits remaining in degree programme.*

FMPR C433 ***Filmmaking Workshop*** (6 credits)
Prerequisite: Third-year standing* in the Major in Cinema, Option A, Film Production, Film Production C332, and written permission of the Department of Cinema and Photography. A course in the theory and practice of filmmaking in 16mm wild sound and Super 8 formats, with some access to 16mm lip-sync equipment for qualified students. The development of concepts of filmmaking introduced in Film Production C332 is continued using these formats.
NOTE: Students are required to bear the cost of film stock, processing, printing and other materials.
**fewer than 36 credits remaining in degree programme.*

FMPR C438 ***Cinematography*** (3 credits)
Prerequisite: Enrolment in the Specialization in Film Production, or the Major in Cinema, Option A, Film Production; Film Production C337, previously or concurrently; and written permission of the Department of Cinema and Photography. An advanced course in camera and light for cinema. The contribution of cinematography to filmmaking is investigated through studio and location shooting exercises, lighting exercises and lectures. Subjects such as film stocks, lenses, filters, and camera movement are discussed as elements in the creative process of filmmaking. *NOTE A/See §200.3*

FMPR C439 ***Advanced Montage in Filmmaking*** (3 credits)
Prerequisite: Film Production C339 and written permission of the Department of Cinema and Photography. A continuation of Film Production C339.

FMPR C440 ***Sound for Film*** (3 credits)
Prerequisite: Film Production C337 and written permission of the Department of Cinema and

Photography. An advanced course in sound and its use in cinema. The contribution of sound to filmmaking is investigated through studio and location recording exercises and through demonstrations.

FMPR C441 ***Writing for Film II*** (3 credits)
Prerequisite: Film Production C341 and written permission of the Department of Cinema and Photography. A continuation of Film Production C341 on a more advanced level.

FMPR C445 ***Professional Internship*** (6 credits)
Prerequisite: Second-year standing* in the Specialization in Film Production, or the Major in Cinema, Option A, Film Production and written permission of the Department of Cinema and Photography. A Film Production student who has been employed within the film industry for not less than 500 hours within the same calendar year may apply for 6 credits on the understanding that the Department of Cinema and Photography must be satisfied that the work was done under the joint supervision of a qualified professional and a full-time Cinema Faculty member. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme*

FMPR C448 ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course of independent study in which the student explores a specific area of Film Production. *NOTE A,C/See §200.3*

FMPR C449 ***Independent Study II*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A student repeating Film Production C448 registers for credit under Film Production C449. *NOTE A/See §200.3*

FMPR 498 ***Special Topics in Film Production*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of film production. *NOTE A,C/See §200.3*

FILMMAKING
Courses in which films are produced as a course requirement are:
Film Animation C312[6], C313[6], C414[6]
Film Production C231[6], C331[6], C332[6], C431[6], C432[6], C433[6]

Photography

PHOT C200 ***Foundations in Photographic Vision: Theory and Practice I*** (6 credits)
Prerequisite: Enrolment in a concentration in the Department of Cinema and Photography or second-year standing* Specialization/Major in the Faculty of Fine Arts.** An exploration of the aesthetics of photography through the rapid accumulation of images in the field and through the study of contact sheets and prints in the studio. Emphasis is placed upon developing an ability to see photographically. Technical procedures, including optical functions and the camera, photographic chemistry, film and paper processing are taught. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme*
***Students enrolled in Specialization/Major in Performing Arts or Inter-related Arts must obtain written permission of the Department.*
NOTE: Students are required to bear the cost of film stock, processing and printing, and other materials.

PHOT C250 ***Development of Photographic Traditions*** (6 credits)
Prerequisite: Enrolment in a BFA degree programme or written permission of the Department of Cinema and Photography. A course tracing the development of photography from its earliest appearance to the present. Issues are dealt with historically and thematically and include ideas about photographs as documents, means of social criticism, forms of personal expression, and sequential imagery. Reference is made to the relationship between photographs and other forms of art and to the social or political contexts which influenced its development.

PHOT C300 ***Photographic Vision: Theory and Practice II*** (6 credits)
Prerequisite: Photography C200 and C250, or written permission of the Department of Cinema and Photography. A studio course directed towards refining darkroom techniques and extending the use of photography as a means of personal expression. Regularly scheduled seminars provide a historical context for contemporary issues. Consideration is given to advanced technical procedures.
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT C310 ***Large Format Photography*** (6 credits)
Prerequisite: Photography C200 and C250 or written permission of the Department of Cinema and Photography. A studio course introducing large format photography, its technique and applications. The Zone System method of exposure control is presented as are various historical and contemporary approaches to view-camera work.
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.

PHOT C320 ***Colour*** (6 credits)
Prerequisite: Photography C200 and C250 or written permission of the Department of Cinema and

Photography. A studio course investigating colour photography, its history and its application by contemporary photographers. Students are introduced to the technical procedures for colour printing, to the theory of colour produced by light and the effects of colour balance.
NOTE: Students are required to bear the cost of film stock, processing, printing and other materials.

PHOT C400 ***Advanced Workshop in Photography*** (6 credits)
Prerequisite: Third-year standing* in the Major in Photography or written permission of the Department of Cinema and Photography. A studio course in which students pursue extended photographic projects in black and white and/or colour. Contemporary issues and advanced techniques are discussed. Ideas concerning conservation and presentation through exhibitions, portfolios, and books are considered.
NOTE: Students are required to bear the cost of film stock, processing, printing, and other materials.
**fewer than 33 credits remaining in degree programme*

PHOT C470 ***Professional Internship*** (6 credits)
Prerequisite: Written permission of the Department of Cinema and Photography and second-year standing* in the Major in Photography. A photography student who has been employed in photography for not less than 500 hours within the same calendar year; or similarly, a student employed for the same amount of time in photographic research, archival work, editing a photographic publication or writing photographic criticism, may apply for 6 credits on the understanding that the Department must be satisfied that the work was done under the joint supervision of a qualified professional and a full-time photography faculty member.
**fewer than 66 credits remaining in degree programme.*

PHOT C481 ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course of independent study in which the student explores a specific area of photography.

PHOT C482 ***Independent Study II*** (3 credits)
Prerequisite: Photography C481 and written permission of the Department of Cinema and Photography. A student repeating Photography C481 registers for credit under Photography C482.

PHOT 498 ***Special Topics in Photography I*** (3 credits)
Prerequisite: Written permission of the Department of Cinema and Photography. A course for advanced students which provides an opportunity for the study of limited and more specialized aspects of photography.

81.70.2 COMMUNICATION STUDIES FILM COURSES*
NOTE: for course descriptions see §30.070.

Students enrolled in the Specialization in Film Studies, the Specialization in Film Production, or the Major in Cinema may select 12 credits from the Communication Studies courses listed below as part of their required Film Studies elective credits.

Cinema Minors may select 6 credits from the Communication Studies courses listed below as part of the 18 Cinema credits required in addition to Film Studies C211 and C212. These credits must be considered as Film Studies elective credits for degree purposes.

COMS C306 Documentary Film (3 credits)

COMS C307 Hollywood in the Silent Era (3 credits)

COMS C308 The German Expressionist Movement (3 credits)

COMS C309 The Revolutionary Soviet Cinema (3 credits)

COMS C310 The Hollywood Genres (3 credits)

COMS C311 The Classic French Cinema (3 credits)

COMS C312 La Nouvelle Vague (3 credits)

COMS C313 Ingmar Bergman and the Scandinavians (3 credits)

COMS C314 The Italians, from Neo-Realism to Today (3 credits)

COMS C315 Shakespeare in the Cinema (3 credits)

COMS C316 The Canadian Cinema (3 credits)

**Communication Studies credits do not fulfill the BFA degree requirement, which states that 18 credits must be outside the Faculty of Fine Arts and 6 credits must be outside the area of concentration.*

81.80 Contemporary Dance

Coordinator
E. LANGLEY, *Associate Professor*

Students are responsible for satisfying their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

60 BFA Major in Contemporary Dance
12 Dance C220[6], C300[6], C400[6]
12 Dance C210[6], C310[6], C410[6]
18 Dance C211[3], C212[3], C320[6], C420[6]
3 Design C202[3]
3 Theatre Performance C201[3]
6 Music C200[6] or, if exempt, Music C210[6]
6 Electives from within the Faculty of Fine Arts, excluding courses offered by the Dance Section.

DANC C210 ***Body Movement I*** (6 credits)
Prerequisite: Enrolment in the Major in Contemporary Dance or written permission of the Coordinator of Contemporary Dance. The technical development of suppleness, strength, coordination, and kinetic awareness is emphasized. Body movement is discussed and developed as preparation for dance. Studio: 6 hours per week.

DANC C211 ***Dance Traditions I*** (3 credits)
A survey of the history of dance, including relations between older dance traditions and styles of modern dance. Lecture course.

DANC C212 ***Dance Traditions II*** (3 credits)
Prerequisite: Dance C211. A continuation of Dance C211. Lecture course.

DANC C220 ***Workshop in Dance I*** (6 credits)
Prerequisite: Dance C210, previously or concurrently and enrolment in the Major in Contemporary Dance or written permission of the Coordinator of Contemporary Dance. Studies in dance, emphasizing the expressive possibilities of movement. Styles of dance are introduced and projects for performance are explored, with consideration being given to the role of visual, acoustic, and verbal elements in dance. Studio: 4 hours per week. Laboratory: 2 hours per week. *NOTE A/See* §*200.3*

DANC C240* **Principles of Contemporary Dance** (6 credits)
Prerequisite: Written permission of the Coordinator of Contemporary Dance. A survey of technical skills, improvisation and dance composition. Studio: 4 hours per week. Laboratory: 2 hours per week.
**Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their degree programme.*

DANC C261 ***Summer Workshop in Dance I*** (3 credits)
Prerequisite: Written permission of the Coordinator of Contemporary Dance. Sequences of studio sessions which may include body movement, improvisation, performance technique and choreography. Studio: 4 hours per week. Laboratory: 2 hours per week.
NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their programme requirements.

DANC C262 ***Summer Workshop in Dance II*** (3 credits)
Prerequisite: Written permission of the Coordinator of Contemporary Dance. A continuation of Dance C261. Studio: 4 hours per week. Laboratory: 2 hours per week.
NOTE: Students enrolled in the Major in Contemporary Dance may not take this course for credit towards their programme requirements.

DANC C300 ***Workshop in Dance II*** (6 credits)
Prerequisite: Dance C220, and enrolment in Major in Contemporary Dance, or written permission of

the Coordinator of Contemporary Dance. A continuation of Dance C220. Studio: 4 hours per week. Laboratory: 2 hours per week.

DANC C310 ***Body Movement II*** (6 credits)
Prerequisite: Dance C300, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Coordinator of Contemporary Dance. A continuation of Dance C210. Studio: 6 hours per week.

DANC C320 ***Choreography I*** (6 credits)
Prerequisite: Dance C300, previously or concurrently, and written permission of the Coordinator of Contemporary Dance. The organization of movement, space, and time into dance performances. The process of choreographic creation is followed through stages of originating the idea, developing the theme, rehearsing, and performing. Student works are performed. Studio: 4 hours per week. Practice laboratory: 2 hours per week. Rehearsal: 4 hours per week.

DANC 398 ***Special Topics in Dance*** (3 credits)
Prerequisite: Written permission of the Coordinator of Contemporary Dance. Topics vary from year to year, taking into account the special aptitudes of instructors and students. Studio: 6 hours. *NOTE C/See §200.3*

DANC C400 ***Workshop in Dance III*** (6 credits)
Prerequisite: Dance C300, and enrolment in the Major in Contemporary Dance, or written permission of the Coordinator of Contemporary Dance. A continuation of Dance C300. Studio: 4 hours per week. Practice laboratory: 2 hours per week.

DANC C410 ***Body Movement III*** (6 credits)
Prerequisite: Dance C400, previously or concurrently, and enrolment in the Major in Contemporary Dance, or written permission of the Coordinator of Contemporary Dance. A continuation of Dance C310. Studio: 4 hours per week.

DANC C420 ***Choreography II*** (6 credits)
Prerequisite: Dance C320, enrolment in Major in Contemporary Dance and written permission of the Coordinator of Contemporary Dance. A continuation of Dance C320. Studio: 4 hours per week. Practice laboratory: 2 hours per week. Rehearsal: 4 hours per week.

DANC 499 ***Topics in Dance*** (6 credits)
Prerequisite: Dance C420 previously or concurrently, enrolment in the Major in Contemporary Dance or written permission of the Coordinator of Contemporary Dance. Advanced choreography where movement shares equal emphasis with all other arts developed into multi-media theatre. Studio: 4 hours per week. Practice laboratory: 2 hours per week. Rehearsal: 4 hours per week.

81.90 Design

Associate Professors
C. GABRIEL-LACKI
J. GOGUEN
L. HAMEL
S. HUDSON
F. MULVEY

Assistant Professor
J. GERMAN
A. STONYER

The Department of Design offers a three-year undergraduate programme providing a firm foundation for what is essentially a multi-faceted discipline. It is the intention of this programme to have students explore the various dimensions of design art in order that they may understand and eventually attend to the design needs of society in an innovative and responsible manner.

Emphasis is placed on design as a visual and aesthetic discipline reflecting human creativity. At the same time, the programme recognizes the integral nature of design as a fusion of many specialities and human concerns in the contemporary world. It adopts a multi-disciplinary approach, taking advantage of the University's wide horizon of intellectual and social concerns. It is considered vital that students recognize the inter-dependence of design, the fine arts, humanities and sciences. The need for personal creative expression and aesthetic sensitivity must be balanced by an understanding of the cultural impact, societal applications and ethical responsibilities of the design artist.

Fundamental to the programme is the student's acquisition of the history of theory and practice in this field, together with an understanding of contemporary critical issues and innovative practices. In all of the theoretical and practical components of the programme, the curriculum emphasizes creative experimentation and imaginative risk-taking. The student is encouraged to develop a keen sense of critical analysis through a process of rational inquiry. Further, the student is encouraged to develop and utilize powers of intellectual curiosity, flexibility and imagination in problem-solving. Visual literacy, articulate verbal and written expression, together with an understanding of selected fundamental technical skills are all integral components of the programme.

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

72 BFA Major in Design Art

30 Design C200[6], C230[6], C311[3], C321[9], C411[3], C431[3]
6-12 Design C422[6], C423[6]
0-6 Design C424[6], C425[6]
6 Drawing C200[6]
12 Studio electives from outside the Department of Design Art, chosen in consultation with an adviser
6 Art History C220[6]
6 Art History elective

Admission to the Major in Design

A. Applicants require the 10.6 profile in the CEGEP (or equivalent). See §81.10.5 and §81.10.6
B. Applicants are responsible for submitting the following to the Department of Design by the deadline date, March 14th:
   1. Portfolios must consist of a minimum of 16 and a maximum of 20 works, labelled with title and date, presented in a proper portfolio which demonstrates creative potential as a designer, and should demonstrate creative potential as a designer. Works presented must represent an ability to draw, to compose, to use colour and to work in three dimensions. Slides or photographs are acceptable only for examples of three-dimensional work.
   2. Letters of intent , no more than one thousand words written in either English or French, which state the ways in which educational background, work experience and *general* interests act as a preparation for the Design Art programme.
   3. Copies of official academic records must be included.
C. Applicants are required to attend an interview. Applicants will be given an appointment date and time by the Department of Design when they submit the above documents.

NOTE: Students are required to bear the cost of materials in Studio Art courses.

Design:

DESI C200 ***Design Fundamentals I*** (6 credits)
Prerequisite: Enrolment in the Major in Design Art or Art C200 exemption. An investigation, through assignments of the visual and structural elements of design, as well as concepts and methods which develop artistic innovation. Knowledge from a variety of disciplines is analyzed in relation to the creative process.

DESI C202 ***Design in the Arts I*** (3 credits)
Prerequisite: Written permission of the Department; Major in Dance or second-year standing in a Faculty of Fine Arts programme outside of Studio Art Section. A foundation course in the elements and principles of design for Fine Arts students, with concentrations outside of Studio Art. The focus is on process rather than product creation in this theoretical and practical preparation for design problems in the student's area of concentration.

DESI C203 ***Design in the Arts II*** (3 credits)
Prerequisite: Design C202. A continuation of Design C202.

DESI C230 ***Design Procedures*** (6 credits)
Prerequisite: Enrolment in the Major in Design Art, Design C200, Drawing C200 and Art History C220 previously or concurrently, or written permission of the Department of Design. A project-based study providing basic knowledge of the tools, materials and procedures necessary for the creative solving of a range of applied, non-commercial design problems. The personal, social and cultural implications of design are emphasized.

DESI C311 ***Design Fundamentals II*** (3 credits)
Prerequisite: Design C200. A continuation of Design C200.

DESI C321 ***Design Project*** (9 credits)
Prerequisite: Design C311, previously or concurrently. A major project in which knowledge gained in first year is applied to all facets of design art in a specified situation. Students work in teams to design or redesign an environment, including everything from graphic images to three-dimensional artifacts.

DESI C411 ***Advanced Design Concepts*** (3 credits)
Prerequisite: Design C321 or written permission of the Department of Design. A study, through seminars and a limited number of workshops, of recent developments in visual thinking relevant to both the fine and applied arts.

DESI C422 ***Advanced Experimental Design: Image*** (6 credits)
Prerequisite: Design C321. A design studio in which innovative concepts, techniques and tools of image-making are investigated and developed.

DESI C423 ***Advanced Experimental Design: Object*** (6 credits)
Prerequisite: Design C321. A design studio in which innovative concepts, techniques and tools of object-making are investigated and developed.

DESI C424 ***Advanced Applied Design: Image*** (6 credits)
Prerequisite: Design C321. Through applied design projects, students are acquainted with innovative practices employed in contemporary commercial image-making.

DESI C425 ***Advanced Applied Design: Object*** (6 credits)
Prerequisite: Design C321. Through applied design projects, students are acquainted with innovative practices employed in contemporary commercial object-making.

DESI C431 ***Design Art Colloquia*** (3 credits)
Prerequisite: Design C321 or written permission of the Department of Design. Visiting lecturers and in-house discussions of the best examples of creative, contemporary design. Field trips, participation in workshops and attendance of lectures outside regularly scheduled class time may be required.

The following courses are offered only for students accepted into the Major in Design or the Honours in Graphic Design prior to the 1986 academic year. These courses will be phased out over the next three years; the schedule of their deletion is available in the Department of Design.

DESI C300 ***Design II: Interior, Exhibition and Experimental Design*** (6 credits)
Prerequisite: Design C200, C210, and C220 or Design C200 and written permission of the Department. A continuation of Design C200. The course has both practical and theoretical elements which reflect the comprehensive nature of the concerns of the designer in the fields of interior design, exhibition design, experimental media-design. Emphasis is placed on the identification and resolution of design problems, using the resources and methods of inquiry of the designer.

DESI C310 ***Materials and Techniques II*** (6 credits)
Prerequisite: Enrolment in the Major in Design and Design C300, previously or concurrently, or written permission of the Department. A continuation of Design C210, using more advanced techniques to deal with complex problems in design. Emphasis is placed on the physical, aesthetic and tactile properties of materials as used in three dimensional design.

DESI C320 ***Methods of Visual Presentation I*** (6 credits)
Prerequisite: Enrolment in the Major in Design and Design C300, previously or concurrently, or written permission of the Department. A continuation of Design C220, with an increased emphasis on the development of the working drawing, the use of "mock-up" in resolving design problems and construction of scaled models as the final means of presenting and communicating a design solution within one of the three prescribed fields of study: interior, exhibition or experimental media-design.

DESI C330 ***Theory and Application*** (6 credits)
Prerequisite: Enrolment in the Major in Design and Design C300, previously or concurrently, or written permission of the Department. An investigation of the design process as a purposeful activity directed towards initiating change in man-made objects. The course covers traditional and contemporary methods of problem solving through all phases systematically from research to implementation. Assignments will permit the student to plan and realize a design project and to focus their work in one field: interior, exhibition or experimental media-design.

DESI C340 ***Theories of Design*** (6 credits)
Prerequisite: Enrolment in the Major in Design or Honours in Graphic Design, or Art History C250, or written permission of the Department. An examination of outstanding and significant achievements in the field of design. Special emphasis is placed on the development of design as an independent art form in the twentieth century. *NOTE A/See §200.3*

DESI C400 ***Major Studio Project*** (6 credits)
Prerequisite: Written permission of the Department and Design C410 concurrently. A student-initiated project, based on the previous two years of learning within the 3D Design Programme. The course will be organized in the form of a contractual arrangement between individual students and their faculty adviser. The project is to be related to the field in which the student has concentrated.

DESI C410 ***Major Project: Supervised Essay*** (6 credits)
Prerequisite: Written permission of the Department and Design C400 concurrently. An extensive essay to provide a theoretical context for the major project. The project is conceived by the student and approved by the departmental adviser who supervises the research and composition of the paper.

DESI C420 ***Methods of Visual Presentation II*** (6 credits)
Prerequisite: Graphic Design C320 or Design C320 and/or written permission of the Department. A workshop for advanced students in which they may focus on a medium central to their interest in fields within the Graphic Design or Three Dimensional Design programmes. Symbology and typography is an integral part of the content.
NOTE: Students who have credit for Graphic Design C420 may not take this course for credit.

DESI C440 ***Independent Study*** (6 credits)
Prerequisite: Written permission of the Department of Design. A course of independent study in which the student explores a special area of design.

DESI C441 ***Independent Study*** (6 credits)
Prerequisite: Written permission of the Department of Design. A course of independent study in which the student explores a specific area of design.

DESI C442 ***Independent Study*** (6 credits)
Prerequisite: Design C441 and written permission of the Department of Design. A course of independent study in which the student explores a specific area of design.

DESI C450 ***Professional Internship*** (6 credits)
Prerequisite: Written permission of the Department and second-year standing*. A design student who has been employed in the design profession for not less than 500 hours within the same calendar year, or similarly a student employed for the same amount of time in design research, or in writing design criticism, may apply for 6 credits on the understanding that the Department must be satisfied that the work was done under the joint supervision of a qualified professional and a full-time faculty member of the Department.
**fewer than 66 credits remaining in degree programme*

DESI C455 ***Independent Study*** (6 credits)
Prerequisite: Written permission of the Department of Design. A course of independent study in which the student explores a specific area of design.

Graphic Design:

GDES C300 ***Graphic Design II*** (6 credits)
Prerequisite: Enrolment in the Major in Design or Honours in Graphic Design and Design C200, C220, and Graphic Design C260. A continuation of Graphic Design C260. The graphic combination of typography, imagery and its reproduction is emphasized in various formats. Portfolio development is required. *NOTE A/See §200.3*

GDES C310 ***Illustration I*** (6 credits)
Prerequisite: Enrolment in the Major in Design or Honours in Graphic Design and Graphic Design

C300, previously or concurrently, or permission of the Department. Exploration of the ideas, techniques, and materials of the illustrator. The course focuses upon both personal development in drawing and technical facility. The study and practice of typography is an integral part of the course. Students are required to develop their portfolios in illustration.

GDES C320 ***Display Graphics I*** (6 credits)
Prerequisite: Enrolment in the Major in Design or Honours in Graphic Design and Graphic Design C300, previously or concurrently, or written permission of the Department. The dynamics of spatial organization as applied to graphic communication. A study of the function of contemporary three-dimensional graphics provides a background for studio experience with structural materials. The study and practice of typography is an integral part of the course. Students are required to develop their portfolios in display graphics.

GDES C330 ***Sequential Graphics I*** (6 credits)
Prerequisite: Enrolment in the Major in Design or Honours in Graphic Design and Graphic Design C300, previously or concurrently, or written permission of the Department. The design of brochures, folders, books, magazines, and other visual formats, including slide presentations. Important considerations include clarity of communication and visual integration of sequential units. The study and practice of typography is an integral part of the course. Students are required to develop their portfolios in sequential graphics.

GDES C410 ***Illustration II*** (6 credits)
Prerequisite: Graphic Design C310 and written permission of the Section. A continuation of Graphic Design C310. While the course deals with a variety of techniques useful in editorial and advertising illustration, it emphasizes personal development in drawing and encourages experimentation with original ideas. Students are required to develop their portfolios in illustration. *NOTE A/See §200.3*

GDES C430 ***Sequential Graphics II*** (6 credits)
Prerequisite: Graphic Design C330 and written permission of the Section. A continuation of Graphic Design C330. Students are required to develop their portfolios in sequential graphics. *NOTE A/See §200.3*

GDES 498 ***Special Topics in Graphic Design*** (3 credits)
Prerequisite: 18 credits in Graphic Design and written permission of the Section. A course for advanced students which provides an opportunity for the study of more specialized areas in Graphic Design.

GDES 499 ***Special Topics in Graphic Design*** (6 credits)
Prerequisite: 18 credits in Graphic Design and written permission of the Section. A course for advanced students which provides an opportunity for the study of more specialized areas in Graphic Design.

81.100 Music

Chairman
C. JACKSON, *Assistant Professor*

Professor
B. LAGACE

Associate Professors
W. BOTTENBERG
P. COHEN
A. CROSSMAN
S. FRIEDLAND

Assistant Professors
L. ADAMS
K. AUSTIN
C. ELLISON
A. HOMZY

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.

The superscript indicates credit value.

SPECIALIZATION IN MUSIC

The Faculty of Fine Arts offers four Specialization programmes in Music, which consist of 66 credits each.

Students applying for entrance to the specializations are accepted into the Major in Integrative Music Studies. Upon completion of thirty credits (the core requirements) students may apply for transfer into one of the specializations. Acceptance is based on the student's general academic performance in all University courses, but especially in the core courses.

Students are expected to participate in public performance as part of any specialization, and are required to do so in the Specialization in Music Performance Studies and the Specialization in Jazz Studies.

CORE REQUIREMENTS

The required 27-30 credit core is identical for all four Specializations in Music, and comprises the following courses:

3-6 Music C230[6], C231[3]
6* Integrative Music Studies C200[6]
6 Integrative Music Studies C310[6]
6 Music History C200[6] (or, if exempt, 6 credits in World Music or Music History selected in consultation with the Music Adviser)
6 Music History elective credits

**With permission of the Department of Music, students with exemption for Integrative Music Studies C200 substitute Integrative Music Studies C300[6].*

NOTE: Students are responsible for following the courses required for the completion of their particular specialization.

66 Specialization in Jazz Studies

27-30 Core
6 Contemporary Music Studies C300[6]
18-24 Contemporary Music Studies C330[6], C401[3], C402[3], Music Performance C330[6], C430[6], Integrative Music Studies C331[3], C332[3], C431[3], C432[3]
6-15 Music electives, other than Music C200[6], selected in consultation with the Music adviser

66 Specialization in Music Performance Studies*

30 Core
6 Music C330[6] or Music Performance Studies C390[6]
6 Music Performance Studies C490[6]
12 Music Performance Studies C311[3], C312[3], C321[3], C322[3], C411[3], C412[3], C421[3], C422[3]
6 Music Performance Studies C370[6], C431[3], C432[3] or Music electives except Music C200[6]
6 Integrative Music Studies C410[6]

**Students interested in pursuing a programme in Early Music should register for the Specialization in Music Performance. Upon completion of the core requirements, these students should select the following options in their Specialization programme:*

Music Performance C311, C312, C411, C412, C441, C442
Music History C311, C312

66 Specialization in Music Theory/ Composition

27-30 Core
6 Integrative Music Studies C300[6]
6-12 Integrative Music Studies C400[6], Contemporary Music Studies C310[6], C320[6], C330[6]
6 Integrative Music Studies C320[6], C331[3], C332[3]
12-21 Music electives, other than Music C200[6], selected in consultation with the Music adviser

66 BFA Specialization in Selected Music Studies

27-30 Core
30-33 Music electives selected in consultation with Music adviser

3-6 Music C491[3], C492[3]

Courses in the Specialization may include the investigation of areas not normally combined in the music curriculum, including musical perception, theory, composition, pedagogy, literature, and performance.

Eligibility:

Completion of core, with B average or better.

Entrance:

Submission and approval of plan of course work and Special Project (Music C491).

Review:

Upon completion of the courses in this Specialization, the Special Project is graded by the appropriate Review Committee. The type of evaluation used depends upon the nature of the project: exhibition, concert, recording, essay or musical production, etc.

54 BFA Major in Integrative Music Studies

6 Music C210[6] (or, if exempt, music electives chosen in consultation with the programme adviser, Music)
3-6 Music C230[6], C231[3]
12 Integrative Music Studies C200[6]*, C310[6]
6 Music History C200[6] (or, if exempt, World Music or Music History elective chosen in consultation with the programme adviser, Music)
6 Music History electives
18-21 Music electives, other than Music C200[6], selected in consultation with a Music adviser

**With permission of the Department of Music, students with exemption for Integrative Music Studies C200 substitute Integrative Music Studies C300[6].*

24 Minor in Music

6 Music C210[6] (or, if exempt, music electives chosen in consultation with a Music adviser)
18 Music electives chosen in consultation with a Music adviser

A student without the necessary music background must take Music C210[6] as a prerequisite to other music courses.

Music:

For specific information regarding entrance to Music courses please see §81.10.6 and §81.10.7.

MUSI C200 ***Musical Literacy*** (6 credits)
An intensive seminar-workshop in theory and aural training designed to extend musical literacy for the student with limited background. Classroom and laboratory.
NOTE: Students in a Major, Minor or Specialization programme in the Department of Music may not take this course for credit towards their degrees.

MUSI C210 ***Theory/Aural Training*** (6 credits)
Prerequisite: Music C200 or exemption. A review of the fundamentals of music theory and aural training. Workshop and laboratory. *NOTE A/See §200.3*

MUSI C223 ***Understanding Music*** (3 credits)
A course in analytical listening for the student who has little or no musical background. The works studied represent the major styles and idioms of Western music. *NOTE A/See §200.3*

MUSI C230 ***Private Study BI*** (6 credits)
Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music co-ordinated with the student's programme.
NOTE A/See §200.3
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI C231 ***Private Study AI*** (3 credits)
Prerequisite: Written permission of the Department of Music. This course offers individual vocal or instrumental instruction in an approved area of music co-ordinated with the student's programme.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI C330 ***Private Study BII*** (6 credits)
Prerequisite: Music C230 or Music C231 and C331, and written permission of the Department of Music. Continuation of Music C230. *NOTE A/See §200.3*
NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER C390.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI C331 ***Private Study AII*** (3 credits)
Prerequisite: Music C231 and written permission of the Department of Music. Continuation of Music C231.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI C430 ***Private Study BIII*** (6 credits)
Prerequisite: Music C330 and written permission of the Department of Music. Continuation of Music C330. *NOTE A/See §200.3*
NOTE: Students enrolled in the Specialization in Music Performance Studies register in MPER C490.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI C431 ***Private Study AIII*** (3 credits)
Prerequisite: Music C331 and written permission of the Department of Music. Continuation of Music C331.
NOTE: Students are required to assume part of the cost of private lessons.
NOTE: Upon the recommendation of the individual instructor, public performance may be required as part of the course.

MUSI C491 ***Special Project in Music*** (3 credits)
Prerequisite: Written permission of the Department of Music. This course is intended for students enrolled in the Specialization in Selected Music Studies. It affords an opportunity for extensive development of the final project under the direction of a Faculty member. The content of this course varies according to the particular area being studied.
NOTE: Students repeating Music C491 register for Music C492 for credit provided the subject matter is different.
NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

MUSI C492 ***Special Project in Music*** (3 credits)
Prerequisite: Music C491 and written permission of the Department of Music. Continuation of Music C491.
NOTE: If the special project is within the realm of performance, the student is required to participate in public performances.

Contemporary Music Studies:

CMUS C300 ***Studio Music I*** (6 credits)
Prerequisite: Written permission of the Department of Music. A workshop programme in selected jazz, rock, popular, and related styles. The study includes ensemble playing, improvisation, score reading, jazz theory, and arranging. Practice period/conference. *NOTE A/See §200.3*
NOTE: Students are required to participate in public performances.

CMUS C310 ***Electro-acoustic Music I*** (6 credits)
Prerequisite: Written permission of the Department of Music. A seminar-workshop in electro-acoustic music composition. Areas covered include tape editing, *musique concrète,* processing of live sounds, recording, and use of the modular analogue synthesizer. Classroom and laboratory. *NOTE A/See §200.3*
NOTE: Students are required to assume the cost of materials.

CMUS C320 ***Music Composition I*** (6 credits)
Prerequisite: Written permission of the Department of Music. A seminar-workshop in traditional and contemporary composition. Emphasis is on the development of the individual's compositional skills. *NOTE A/See §200.3*

CMUS C330 ***Jazz Composition I*** (6 credits)
Prerequisite: INMS C331 and C332 and written permission of the Department of Music. A seminar-workshop in jazz composition. After an examination of components of composition from the jazz repertoire, students write original music based on the Blues, song forms and such extended forms as those in the style of Be-bop, Bossa Nova, Ragtime and Modal Jazz. *NOTE A/See §200.3*

CMUS C401 ***Studio Music II*** (3 credits)
Prerequisite: Contemporary Music Studies C300, or written permission of the Department of Music. An intensive study of selected problems in the development of studio musicianship. The areas covered are determined by specific class needs. Practice period/conference. This is a full-year course. *NOTE A/See §200.3*
NOTE: Students are required to participate in public performances.

CMUS C402 ***Studio Music III*** (3 credits)
Prerequisite: Contemporary Music Studies C401, or written permission of the Department of Music. Continuation of Contemporary Music Studies C401. This is a full-year course. *NOTE A/See §200.3*
NOTE: Students are required to participate in public performances.

CMUS C410 ***Electro-acoustic Music II*** (6 credits)
Prerequisite: Contemporary Music Studies C310. Continuation of Electro-acoustic Music I. Classroom and laboratory. *NOTE A/See §200.3*
NOTE: Students are required to participate in public performances.

CMUS C420 ***Music Composition II*** (6 credits)
Prerequisite: Contemporary Music Studies C320 and written permission of the Department of Music. Continuation of Contemporary Music Studies C320. *NOTE A/See §200.3*

CMUS C430 ***Jazz Composition II*** (6 credits)
Prerequisite: Contemporary Music Studies C330. Continuation of Contemporary Music Studies C330. *NOTE A/See §200.3*

CMUS C446 ***Electro-acoustic Music Seminar Workshop*** (3 credits)
Prerequisite: Contemporary Music Studies C410. A seminar workshop for advanced students which provides an opportunity for continued study in electro-acoustic music. Classroom and laboratory. *NOTE C/See §200.3*

CMUS C447 ***Electro-acoustic Music Seminar Workshop*** (3 credits)
Prerequisite: Contemporary Music Studies C446. A student repeating Contemporary Music Studies C446 registers for credit under Contemporary Music Studies C447. Classroom and laboratory.

CMUS C471* ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Music. An independent study for advanced students in a selected area of composition. The project must be submitted in writing to, and approved by, the Department of Music. *NOTE C/See §200.3*
**Students may count a maximum of 9 credits in independent studies toward their degree programmes.*

CMUS C472* ***Independent Study II*** (3 credits)
Prerequisite: Written permission of the Department of Music. A student repeating Contemporary Music Studies C471 for credit registers for Contemporary Music Studies C472.
**Students may count a maximum of 9 credits in independent studies towards their degree programmes.*

CMUS 498 ***Special Topics in Composition*** (3 credits)
Prerequisite: Written permission of the Department of Music. A seminar-workshop in composition. Emphasis in any given year may be in one or more of the following: free composition, music for the media, technological or experimental musics. *NOTE A,C/See §200.3*

Integrative Music Studies:

INMS C200 ***Theory/Composition/Analysis I*** (6 credits)
Prerequisite: Music C210 or exemption. A workshop in theory, composition, analysis, and related areas. The course explores one or more traditional, contemporary, or experimental approaches to the organization and uses of sound materials. Classroom and laboratory. *NOTE A/See §200.3*

INMS C300 ***Theory/Composition II*** (6 credits)
Prerequisite: Integrative Music Studies C200 or equivalent. A study that co-ordinates exercises in part-writing and harmony with composition. Students work in a variety of traditional and contemporary forms, styles, and media. Classroom and laboratory. *NOTE A/See §200.3*

INMS C310 ***Aural Perception: Analytical Hearing I*** (6 credits)
Prerequisite: Written permission of the Department of Music. Hearing skills are developed through exercises in aural concentration, recall, reproduction, imagination, analysis, and transcription. The sound materials used range from traditional to electronic-acoustic, natural, and mechanical. Classroom and laboratory. *NOTE A/See §200.3*

INMS C320 ***Comparative Analysis*** (6 credits)
Prerequisite: Integrative Music Studies C200 or exemption. Development of analytical methodology. Study of selected works representing various forms and styles from different historical periods. *NOTE A/See §200.3*

INMS C331 ***Instrumentation/Arranging I*** (3 credits)
Prerequisite: Written permission of the Department of Music. A study of the capabilities and uses of instruments in a variety of musical situations ranging from small ensembles to full orchestra. The areas covered are determined by class needs. Workshop and laboratory. *NOTE A/See §200.3*

INMS C332 ***Instrumentation/Arranging II*** (3 credits)
Prerequisite: Integrative Music Studies C331. Continuation of Integrative Music Studies C331. *NOTE A/See §200.3*

INMS C400 ***Theory/Composition/Analysis III*** (6 credits)
Prerequisite: Integrative Music Studies C300, or exemption. A continuation of Integrative Music Studies C300 at a more advanced level. Study of writing techniques of the late nineteenth and twentieth centuries, and work in counterpoint. Classroom and laboratory. *NOTE A/See §200.3*

INMS C410 ***Aural Perception: Analytical Hearing II*** (6 credits)
Prerequisite: Integrative Music Studies C310, or written permission of the Department of Music. An intensive study of selected problems in hearing, analyzing, and transcribing music. The course combines individual and group exercises, with structural analysis. Areas to be covered are determined by specific class needs. *NOTE A/See §200.3*

INMS C421 ***Comparative Analysis III*** (3 credits)
Prerequisite: Integrative Music Studies C320. Continuation of Integrative Music Studies C320. *NOTE A/See §200.3*

INMS C422 ***Comparative Analysis IV*** (3 credits)
Prerequisite: Integrative Music Studies C421. Continuation of Integrative Music Studies C421. *NOTE A/See §200.3*

INMS C431 ***Instrumentation/Arranging III*** (3 credits)
Prerequisite: Integrative Music Studies C332. Continuation of Integrative Music Studies C332. *NOTE A/See §200.3*

INMS C432 ***Instrumentation/Arranging IV*** (3 credits)
Prerequisite: Integrative Music Studies C431. Continuation of Integrative Music Studies C431. *NOTE A/See §200.3*

INMS C440 ***Aural Perception: Analytical Hearing III*** (6 credits)
Prerequisite: Integrative Music Studies C410, or written permission of the Department of Music. Continuation of Integrative Music Studies C410. *NOTE A/See §200.3*

INMS C471* ***Independent Study I*** (3 credits)
Prerequisite: Third-year standing** and written permission of the Department of Music. An independent study for advanced students in a theory/composition area of their own choice. The project must be submitted in writing to, and approved by, the Department of Music.
**Students may count a maximum of 9 credits in independent studies toward their degree programmes.*
***fewer than 33 credits remaining in this degree programme.*

INMS C472* ***Independent Study II*** (3 credits)
Prerequisite: Integrative Music Studies C471 and written permission of the Department of Music. A student repeating Integrative Music Studies C471 registers for Integrative Music Studies C472 for credit.
**Students may count a maximum of 9 credits in independent studies toward their degree programmes.*

Music History:

MHIS C200 ***Music History and Society*** (6 credits)
A survey of musical styles in their social context, from pre-history to the present day. While emphasis is on the mainstream of the Western tradition, attention is also given to folk, popular, and jazz styles, as well as the music of other cultures. *NOTE A/See §200.3*

MHIS C302 ***Music of the Baroque*** (3 credits)
Prerequisite: Music History C200 and Integrative Music Studies C200 or exemptions. Representative works from the early seventeenth to the mid-eighteenth century. The evolution of "common practice" is traced in the forms, styles, and performance practices of the great masters and schools.

MHIS C303 ***Classical History*** (3 credits)
Prerequisite: Music History C200 and Integrative Music Studies C200 or exemptions. Representative works from the ages of Haydn, Mozart, and Beethoven. Styles, forms, and performance practices are examined within the context of eighteenth-century social and cultural developments.

MHIS C304 ***Romanticism in Music*** (3 credits)
Prerequisite: Music History C200 and Integrative Music Studies C200 or exemptions. Representative works from the late eighteenth to early twentieth century. Styles and performance practices are studied as expressions of the romantic consciousness.

MHIS C305 ***Music in the Twentieth Century*** (3 credits)
Prerequisite: Music History C200 and Integrative Music Studies C200 or exemptions. Selected areas or movements in twentieth-century music. Topics for consideration may include the work of a major composer, national schools, stylistic schools, or contemporary thought on music.

MHIS C311 ***Medieval Music History*** (3 credits)
Prerequisite: Music History C200 and Integrative Music Studies C200 or exemptions. The development of basic patterns of Western Music is traced in reference to the historical and cultural forces of the Middle Ages. *NOTE A/See §200.3*

MHIS C312 ***Renaissance Music*** (3 credits)
Prerequisite: Music History C200 and Integrative Music Studies C200 or exemptions. Musical styles from the mid-fifteenth to the early seventeenth century are examined in the context of the cultural changes which shaped the humanistic age. *NOTE A/See §200.3*

MHIS C314 ***Jazz History*** (3 credits)
Prerequisite: Music History C200 and Integral Music Studies C200 or exemption. A study in the historical developments and the personalities that contributed to the evolution of jazz styles.

MHIS C471* ***Independent Study I*** (3 credits)
Prerequisite: Third-year standing** and written permission of the Department of Music. An independent study for advanced students to do intensive individual research in a selected period, area or facet of music history. The project must be submitted in writing to, and be approved by, the Department of Music. *NOTE C/See §200.3*
**Students may count a maximum of 9 credits in independent studies toward their degree programmes.*
***fewer then 33 credits remaining in the programme.*

MHIS C472* ***Independent Study II*** (3 credits)
Prerequisite: Music History C471 and written permission of the Department of Music. A student repeating Music History C471, registers for Music History C472 for credit.
**Students may count a maximum of 9 credits in independent studies toward their degree programmes.*

MHIS 498 ***Special Topics in Music History*** (3 credits)
Prerequisite: Twelve credits in Music and written permission of the Department of Music. A study of a selected period, area, or contribution. In a given year, the study may examine any significant aspect of Western, non-Western, or other musics. *NOTE C/See §200.3*

Music in Education:

MINE C301 ***Music for Classroom Use I*** (3 credits)
Prerequisite: Enrolment in the Specialization in Early Childhood Education, Major in Child Studies, or written permission of the Department of Music. This course is designed to give the student a working knowledge of contemporary techniques of group instruction in music. At least one established or experimental method is covered in some depth; for example, Orff, Kodaly, Dalcroze, Martentot, Schafer, Dennis. While the main emphasis is on the cultivation of musicality in the pre-school and elementary school child, the implications for music education in general are also explored. Classroom work includes opportunities for demonstration and practice teaching. *NOTE A/See §200.3*

MINE C302 ***Music for Classroom Use II*** (3 credits)
Prerequisite: Music in Education C301 and written permission of the Department of Music. A continuation of Music in Education C301. *NOTE A/See §200.3*

MINE C430 ***Studies in Music in Education*** (6 credits)
Prerequisite: Written permission of the Department of Music. A study of selected problems in music education. *NOTE C/See §200.3*

MINE C431 ***Seminar-Workshop in Music Education I*** (3 credits)
Prerequisite: Written permission of the Department of Music. A study of selected problems in the musical education of the child. Among the areas considered are the music curriculum, music and the other arts, concepts of musicality, musical thinking, the education of the musically gifted child, and the musical environment in home and school. Discussion is combined with workshop demonstrations. *NOTE A/See §200.3*

MINE C432 ***Seminar-Workshop in Music Education II*** (3 credits)
Prerequisite: Music in Education C431. Continuation of Music in Education C431. *NOTE A/See §200.3*

MINE C440 ***Studies in Music in Education*** (6 credits)
Prerequisite: Music in Education C430. A student repeating Music in Education C430 registers under Music in Education C440 for credit provided the subject matter is different.

Music Performance Studies:

NOTE: All students wishing to register for music ensembles, the orchestra, the choir, etc., must contact the Department of Music *at least two weeks prior to their registration date* to arrange an audition.

MPER C200 ***Orchestra I*** (6 credits)
Prerequisite: Written permission of the Department of Music. Students enrolled in this course participate in the Concordia Orchestra. *NOTE A/See §200.3*

MPER C201 ***Orchestra I J*** (3 credits)
Prerequisite: Written permission of the Department of Music. Students enrolled in this course participate in the Concordia Orchestra.

MPER C220 ***Choir I*** (6 credits)
Prerequisite: Written permission of the Department of Music. Students enrolled in this course participate in the Concordia Choir. *NOTE A/See §200.3*

MPER C221 ***Choir I J*** (3 credits)
Prerequisite: Written permission of the Department of Music. Students enrolled in this course participate in the Concordia Choir. *NOTE A/See §200.3*

MPER C300 ***Orchestra II*** (6 credits)
Prerequisite: Music Performance Studies C200, or C201, and written permission of the Music Department. Continuation of Music Performance Studies C200 (C201). *NOTE A/See §200.3*

MPER C311 ***Early Music Ensemble I*** (3 credits)
Prerequisite: Written permission of the Department of Music. A study, through performance, of representative vocal and instrumental works from the middle ages to the early baroque. *NOTE A/See §200.3*

MPER C312 ***Early Music Ensemble II*** (3 credits)
Prerequisite: Music Performance Studies C311. Continuation of Music Performance Studies C311. *NOTE A/See §200.3*

MPER C320 ***Choir II*** (6 credits)
Prerequisite: Music Performance Studies C220 or C221 and written permission of the Music Department. Continuation of Music Performance Studies C220 (C221). *NOTE A/See §200.3*

MPER C321 ***Traditional/Contemporary Ensemble I*** (3 credits)
Prerequisite: Written permission of the Department of Music. A study, through performance, of selected works from the traditional and contemporary repertoires. The works studied are determined by class needs and the particular skills of each student. *NOTE A/See §200.3*

MPER C322 ***Traditional/Contemporary Ensemble II*** (3 credits)
Prerequisite: Written permission of the Department of Music. Continuation of Music Performance Studies C321. *NOTE A/See §200.3*

MPER C330 ***Jazz Improvisation I*** (6 credits)
Prerequisite: Written permission of the Department of Music after audition. A performance-analysis course that examines the craft of jazz improvisation. A broad spectrum of jazz improvisational styles is examined. Participation in a public recital is required.

MPER C370 ***Musical Performance Skills I*** (6 credits)
Prerequisite: Written permission of the Department of Music. A seminar-workshop on specific problems in learning, teaching and developing musical performance skills. Included is the analysis and organization of practice, technique, reading, memory, performance practices. style, interpretation, accompaniment and recital preparation. Particular attention is given to the integration of skill with musical understanding. *NOTE A/See §200.3*

MPER C390 ***Advanced Private Study I*** (6 credits)
Prerequisite: Written permission of the Department of Music and enrolment in the Specialization in Music Performance Studies. This course offers intensive vocal or instrumental instruction for students specializing in performance. A juried examination is required. *NOTE A/See §200.3*
NOTE: Students are required to assume part of the cost of private lessons.

MPER C400 ***Orchestra III*** (6 credits)
Prerequisite: Music Performance Studies C300. Continuation of Music Performance Studies C300. *NOTE A/See §200.3*

MPER C411 ***Early Music Ensemble III*** (3 credits)
Prerequisite: Music Performance Studies C312. Continuation of Music Performance Studies C312. *NOTE A/See §200.3*

MPER C412 ***Early Music Ensemble IV*** (3 credits)
Prerequisite: Music Performance Studies C411. Continuation of Music Performance Studies C411. *NOTE A/See §200.3*

MPER C420 ***Choir III*** (6 credits)
Prerequisite: Music Performance Studies C320. Continuation of Music Performance Studies C320. *NOTE A/See §200.3*

MPER C421 ***Advanced Repertoire I*** (3 credits)
Prerequisite: Written permission of the Department of Music. An intensive study of selected works from the repertoire. Particular consideration is given to the acquisition of proficiency in conducting, balance, style, interpretation, and related dimensions of higher technique. *NOTE A/See §200.3*

MPER C422 ***Advanced Repertoire II*** (3 credits)
Prerequisite: Music Performance Studies C421 and written permission of the Department of Music. Continuation of Music Performance Studies C421. *NOTE A/See §200.3*

MPER C430 ***Jazz Improvisation II*** (6 credits)
Prerequisite: Music Performance Studies C330 and written permission of the Department of Music. Continuation of Music Performance Studies C330.

MPER C431 ***Seminar-Workshop in Performance I*** (3 credits)
Prerequisite: Written permission of the Department of Music. This course examines selected problems in the development of performance skills. The areas covered are, whenever possible, determined by the specific interests of students. Topics, in any given year, may include: technique, practice, style, interpretation, accompaniment, ensemble, teaching children, the adult student. *NOTE A/See §200.3*

MPER C432 ***Seminar-Workshop in Performance II*** (3 credits)
Prerequisite: Music Performance Studies C431, previously or concurrently. Topics vary among sections and also from year to year. A continuation of Music Performance Studies C431. *NOTE A/See §200.3*

MPER C433 ***Seminar-Workshop in Performance III*** (3 credits)
Prerequisite: Music Performance Studies C432, previously or concurrently. Topics vary among sections and also from year to year. A continuation of Music Performance Studies C432. *NOTE A/See §200.3*

MPER C434 ***Seminar-Workshop in Performance IV*** (3 credits)
Prerequisite: Music Performance Studies C433, previously or concurrently. Topics vary among sections and also from year to year. A continuation of Music Performance Studies C433. *NOTE A/See §200.3*

MPER C441 ***Performance Practice/Documentation*** (3 credits)
Prerequisite: Written permission of the Department of Music. A study of historical sources applied directly to performance. Topics covered include ornamentation, improvisation, figured bass, "The Doctrine of the Affections", early notation, and bibliography.

MPER C442 ***Performance Practice/Documentation*** (3 credits)
Prerequisite: Music Performance Studies C441. A continuation of Music Performance Studies C441.

MPER C470 ***Musical Performance Skills II*** (6 credits)
Prerequisite: Music Performance Studies C370 and written permission of the Department of Music. Continuation of Music Performance Studies C370. *NOTE A/See §200.3*

MPER C471* ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Music. An independent study intended primarily for advanced students in a performance practice area of their own choice. *NOTE C/See §200.3*
**Students may count a maximum of 9 credits in independent studies toward their degree programmes.*

MPER C472* ***Independent Study II*** (3 credits)
Prerequisite: Music Performance Studies C471 and written permission of the Department of Music. A student repeating Music Performance Studies C471 registers for Music Performance Studies C472 for credit.
**Students may count a maximum of 9 credits in independent studies toward their degree programmes.*

MPER C490 ***Advanced Private Study II*** (6 credits)
Prerequisite: Music C330 or Music Performance Studies C390, enrolment in the Specialization in Music Performance Studies and written permission of the Department of Music. An approved public recital may be substituted for the juried examination. *NOTE A/See §200.3*
NOTE: Students are required to assume part of the cost of private lessons.

World Music:

WMUS C300 ***Folk Music of the Americas*** (6 credits)
Prerequisite: Written permission of the Department of Music. A survey of the roots and development of traditional music in the New World. The study examines aboriginal as well as transplanted and hybrid styles; urban and rural musics, with special attention to European and African antecedents; the relationship of folk musics to popular and cultivated styles; transcription and arrangement, ethnomusicological method. *NOTE A/See §200.3*

WMUS C310 ***Music in the Non-Western World*** (6 credits)
Prerequisite: Written permission of the Department of Music. A survey of the art, religious, and folk music of non-European cultures. The study includes an examination of cross-cultural parallels and influences, instruments, notations, textures, techniques of performance, and problems of interpretation. Illustrated with recordings and slides. *NOTE A/See §200.3*

WMUS C320 ***Folk and Traditional Music I*** (6 credits)
Prerequisite: Written permission of the Department of Music. The music of a selected culture or community. While in a given year the study may consider the music of any world culture, particular attention is given to the musical heritage of ethnic minorities residing in Canada. *NOTE A/See §200.3*

WMUS C330 ***Folk and Traditional Music II*** (6 credits)
Prerequisite: Written permission of the Department of Music. Continuation of World Music C320. *NOTE A/See §200.3*

WMUS C340 ***Folk and Traditional Music III*** (6 credits)
Prerequisite: Written permission of the Department of Music. Continuation of World Music C330. *NOTE A/See §200.3*

81.110 Painting and Drawing

Chairman
P. LANDSLEY, *Associate Professor*

Professors
Y. GAUCHER
G. MOLINARI
A. PINSKY

Associate Professors
M. DEWES
J. FOX
R. GORDON
J. KRAUSE
J. MILLER
I. WHITTOME

Assistant Professor
L. PLOTEK

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

60 BFA Major in Art History and Studio Art

6 Art History C250[6]*
6 Art History C234[6] or Studio Art elective
6 Art C200[6] (or, if exempt, a Studio Art elective)
24 Art History electives**
18 Studio Art electives chosen from studio courses offered by Departments of: Design; Painting and Drawing; Printmaking; Sculpture, Ceramics and Fibres; and Photography from Cinema and Photography

**Students who have entered this programme prior to the Fall Session 1983 and who have not completed ARTH C240[6] must take ARTH C250[6].*

***ART C460 may be substituted for 6 credits in Art History.*

60 BFA Major in Studio Art

6 Art History elective credits
6 Art theory or Art History elective
6 Art C200[6] (or, if exempt, an elective in Studio Art)
30* Studio Art electives
12* 300 and 400 level in a single medium selected from one of the following departments: Painting and Drawing; Printmaking; Sculpture, Ceramics and Fibres

**Studio courses offered by the Department of Design; Department of Art Education and Art Therapy and Photography courses from the Department of Cinema and Photography may be selected as Studio Art electives, but do not satisfy the sequence requirements.*

30 Minor in Art History and Studio Art

6 Art History C250[6]
6 Art C200[6] (or, if exempt, a studio art elective)
6-12 Art History electives
6-12 Studio Art electives selected from studio courses offered by the Departments of: Design; Painting and Drawing; Printmaking; Sculpture, Ceramics and Fibres

Art C200 is a prerequisite for all studio art courses and is included in the 90 credits required for the BFA degree. Exemption from Art C200 is granted to students with the recommended background in Studio Art in the CEGEP and to those presenting acceptable portfolios to the Faculty Portfolio Committee (81.10.5). When exemption is granted, Art C200 is replaced within the 90 credits by an appropriate Studio Art elective.

NOTE: Students are required to bear the cost of materials in Studio Art courses.

Art:

ART C200 ***Studio Art I*** (6 credits)
Principles of theory and practice in the visual arts, including explorations in two and three dimensions.

ART C417 ***Open Media*** (6 credits)
Prerequisite: 30 credits in Studio Art; 400-level studio courses concurrently; or written permission of

the Department. A seminar encompassing an unlimited range and combination of materials.* The varied nature of this approach invites students to provide their own circumstances for creating work. *NOTE A/See §200.3*
**Students are required to bear the cost of materials and, when loan arrangements cannot be made through the Audio-Visual Department, equipment rental.*

ART C460 ***Analysis of Great Works of Art*** (6 credits)
A course in art principles. Through the formal analysis of selected masterpieces of painting and sculpture, the student is led to a fuller comprehension of the nature of formal order in the arts. *NOTE A/See §200.3*

ART C461 ***Aesthetic Inquiry in Visual Arts*** (6 credits)
A course in the application of aesthetic theories to the objects and events of visual arts. Topics include the artistic process as expression, intuition, and imagination. Further consideration is given to the products of painting, sculpture, and graphics, emphasizing various contemporary critical and theoretical stances. *NOTE A/See §200.3*

Painting:

PTNG C200 ***Painting I*** (6 credits)
Prerequisite: Art C200 or Art C200 exemption. An exploration of painting, colour, style, image, visual skills, and the technology of painting materials. *NOTE A/See §200.3*

PTNG C300 ***Painting II*** (6 credits)
Prerequisite: Painting C200. A course in which various media and forms of expressions are explored at the more advanced level. *NOTE A/See §200.3*

PTNG C400 ***Painting III*** (6 credits)
Prerequisite: Painting C300. A continuation of Painting C300. *NOTE A/See §200.3*

PTNG C420 ***Seminar/Workshop in Painting*** (6 credits)
Prerequisite: Eighteen credits in studio art and written permission of the Department. An advanced studio course in painting.

PTNG C450 ***Advanced Studio in Painting*** (6 credits)
Prerequisite: Painting C400. A continuation of Painting C400. *NOTE A/See §200.3*

PTNG C470 ***Independent Study I*** (6 credits)
Prerequisite: Third-year standing* and written permission of the Department of Painting and Drawing. A course of independent study in which the advanced student explores a specific area in painting. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree requirements.*

PNTG 498 ***Special Topics in Painting*** (3 credits)
Prerequisite: Third-year standing* and written permission of the Department of Painting and Drawing. A course for the advanced student which provides an opportunity for the study of more specialized areas in painting. *NOTE C/See §200.3*
**fewer than 33 credits remaining in degree requirements*

PNTG 499 ***Special Topics in Painting*** (6 credits)
Prerequisite: Third-year standing* and written permission of the Department of Painting and Drawing. A course for advanced students which provides an opportunity for the study of more specialized areas in painting. *NOTE C/See §200.3*
**fewer than 33 credits remaining in degree requirements*

Drawing:

DRAW C200 ***Drawing I*** (6 credits)
Prerequisite: Art C200 or Art C200 exemption. An exploration of drawing as a means of expression. Various media are employed to examine and express form, space, figurative, and other graphic images. Drawing from observation, imagination, and memory is included. *NOTE A/See §200.3*

DRAW C300 ***Drawing II*** (6 credits)
Prerequisite: Drawing C200. A drawing course in which various media and forms of expression are explored at the more advanced level. Lectures and studio periods. *NOTE A/See §200.3*

DRAW C400 ***Drawing III*** (6 credits)
Prerequisite: Drawing C300. Continuation of Drawing C300. *NOTE A/See §200.3*

DRAW C470 ***Independent Study*** (6 credits)
Prerequisite: Third-year standing* and written permission of the Department of Painting and Drawing. A course of independent study in which the advanced student explores a specific area of drawing.
**fewer than 33 credits remaining in degree requirements.*

DRAW 498 ***Special Topics in Drawing*** (3 credits)
Prerequisite: Third-year standing* and written permission of the Department of Painting and Drawing. A course for advanced students which provides an opportunity for the study of more specialized areas in drawing. *NOTE C/See §200.3*
**fewer than 33 credits remaining in degree requirements*

DRAW 499 ***Special Topics in Drawing*** (6 credits)
Prerequisite: Third-year standing* and written permission of the Department of Painting and Drawing. A course for advanced students which provides an opportunity for the study of more specialized areas in drawing. *NOTE C/See §200.3*
**fewer than 33 credits remaining in degree requirements*

81.120 Printmaking

Chairman
J. KELLY, *Associate Professor*

Associate Professors
R. BIGELOW
D. JONES
B. WAINWRIGHT

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

66 BFA Specialization in Printmaking*

12 Art History electives
12 Drawing C200[6], C300[6]
12 Printmaking C310[6], C320[6], C330[6]
6 Art C200[6] or, if exempt, Painting C200[6], Photography C200[6], Sculpture C200[6] or studio art elective

Option A (Intensive)

12 Printmaking C210[6], C220[6], C230[6]
6 Printmaking C410[6], C420[6], C430[6]
6 Printmaking C450[6], Fibres C440[6]

Option B (Extensive)

18 Printmaking C210[6], C220[6], C230[6]
6 Printmaking C410[6], C420[6], C430[6], C450[6], Art C440[6]

**All students select courses from the core of 42 credits.*

Option A permits specialization in two of the three areas of printmaking (intaglio, lithography, or serigraphy).

Option B requires students to follow courses at the 200 level in all three areas of printmaking.

Normally, students applying for entrance to the Specialization are accepted into the Major in Studio Art. It is recommended that full-time students register for 12 credits in Printmaking in their first 30 credits. Upon completion of these 30 credits, students may apply for transfer by submitting their portfolios to the Department of Printmaking. Acceptance into the Specialization is based on the student's academic performance at Concordia and especially on the portfolio.

60 Major in Studio Art
For description of programme please see Department of Painting and Drawing, §81.110.

Art C200 is a prerequisite for all studio art courses and is included in the 90 credits required for the BFA degree. Exemption from Art C200 is granted to students with the recommended background in studio art in the CEGEP and to those presenting acceptable portfolios to the Faculty Portfolio Committee (81.10.5). When exemption is granted, Art C200 is replaced within the 90 credits by an appropriate Studio Art elective.

NOTE: Students are required to bear the cost of materials in Studio Art courses.

Art:

For course descriptions, please see Department of Painting and Drawing, §*81.110.*

Printmaking:

PRIN C210 ***Intaglio I*** (6 credits)
Prerequisite: Drawing C200, previously or concurrently. A study of the basic principles of traditional and contemporary intaglio techniques, such as drypoint, etching and aquatint. *NOTE A/See §200.3*

PRIN C220 ***Lithography I*** (6 credits)
Prerequisite: Drawing C200, previously or concurrently. A study of the basic principles of traditional and contemporary techniques in stone and plate lithography. *NOTE A/See §200.3*

PRIN C230 ***Serigraphy I*** (6 credits)
Prerequisite: Drawing C200, previously or concurrently. A study of the basic principles of screen printing, including direct techniques, photo-screen, and cut film. *NOTE A/See §200.3*

PRIN C240 ***Relief Processes*** (6 credits)
Prerequisite: Drawing C200, previously or concurrently. A study of the basic principles of traditional and contemporary techniques in relief printing, such as woodcut, linocut and collograph.

PRIN C310 ***Intaglio II*** (6 credits)
Prerequisite: Printmaking C210. Continuation of Printmaking C210. *NOTE A/See §200.3*

PRIN C320 ***Lithography II*** (6 credits)
Prerequisite: Printmaking C220. Continuation of Printmaking C220. *NOTE A/See §200.3*

PRIN C330 ***Serigraphy II*** (6 credits)
Prerequisite: Printmaking C230. Continuation of Printmaking C230. *NOTE A/See §200.3*

PRIN C410 ***Intaglio III*** (6 credits)
Prerequisite: Printmaking C310. Advanced intaglio techniques.

PRIN C420 ***Lithography III*** (6 credits)
Prerequisite: Printmaking C320. Advanced lithographic techniques.

PRIN C430 ***Serigraphy III*** (6 credits)
Prerequisite: Printmaking C330. Advanced screen printing.

PRIN C450 ***The Print in Books, Portfolios and Other Containers*** (6 credits)
Prerequisite: Printmaking C310 or C320 or C330, previously or concurrently and 18 credits in studio art. The print in books, portfolios, and other containers. Emphasis is placed on relief and intaglio methods and the relationship of type to image.

PRIN C470 ***Independent Study in Printmaking*** (6 credits)
Prerequisite: Third-year standing* and written permission of the Department of Printmaking. A course of independent study in which the advanced student explores a specific area of printmaking. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree requirements*

PRIN 498 ***Special Topics in Printmaking*** (3 credits)
Prerequisite: Third-year standing* and written permission of the Department of Printmaking. A course for advanced students which provides the opportunity for the study of more specialized areas of printmaking. *NOTE C/See §200.3*
**fewer than 33 credits remaining in degree requirements*

PRIN 499 ***Special Topics in Printmaking*** (6 credits)
Prerequisite: Third-year standing* and written permission of the Department of Printmaking. A course for advanced students which provides the opportunity for the study of more specialized areas of printmaking. *NOTE C/See §200.3*
**fewer than 33 credits remaining in degree requirements*

81.130 Sculpture, Ceramics and Fibres

Chairman
W. KROL, *Assistant Professor*

Associate Professors
D. DORRANCE
R. GOMEZ
H.W. JONES
K. LIPKE
N. WAGNER

Assistant Professor
A. DUTKEWYCH

For detailed information regarding admission to Sculpture, Ceramics or Fibres programmes, students should contact the Department of Sculpture, Ceramics and Fibres.

Students are responsible for fulfilling their particular degree requirements; hence, the following sequences must be read in conjunction with §81.20.

The superscript indicates credit value.

60 BFA Major in Ceramics
36 Ceramics C230[6], C330[6], C430[6]; Sculpture C465[6]*, C490[6]; Drawing C200[6]
6 Art History C320[6]
6 Art History electives
6 Sculpture C200[6]; Fibres C240[6], C260[6], C470[6]
6 Elective from the Department of Sculpture, Ceramics and Fibres

**With permission of the Department, students may substitute Art C460, C461, or Art History elective.*

60 BFA Major in Fibres
18 Fibres C240[6], C260[6]; Sculpture C465[6]*
12 Fibres C340[6] and C440[6], or Fibres C360[6] and C460[6]
6 Art History C322[6]
6 Art History electives
6 Sculpture C200[6]; Drawing C200[6]; Ceramics C230[6]
12 Elective from the Department of Sculpture, Ceramics and Fibres

**With permission of the Department, students may substitute Art C460, C461, or Art History elective.*

60 BFA Major in Sculpture
36 Sculpture C200[6], C300[6], C400[6], C465[6]*, C490[6]; Drawing C200[6]
12 Art History electives
6 Ceramics C230[6]; Fibres C240[6], C260[6], C470[6]
6 Elective from Department of Sculpture, Ceramics and Fibres

**With permission of the Department, students may substitute Art C460, C461, or Art History elective.*

60 BFA Major in Studio Art
6 Art History elective
6 Art Theory or Art History elective
6 Art C200[6] (or, if exempt, an elective in Studio Art)
30* Studio Art electives*
12* 300 and 400 level in a single medium selected from one of the following Departments: Painting and Drawing; Printmaking; Sculpture, Ceramics and Fibres

**Studio courses offered by the Department of Design; Department of Art Education and Art Therapy and photography courses from the Department of Cinema and Photography may be selected as Studio Art electives, but do not satisfy the sequence requirements.*

Admission

Normally, students applying for entrance into a Major in Ceramics, Fibres or Sculpture are initially accepted into the Major in Studio Art. It is recommended that full-time students register for 18 credits in courses in Ceramics, Fibres and Sculpture, in their first 30 credits, *these credits to be selected in consultation with an adviser from the Department of Sculpture, Ceramics and Fibres.*

Upon completion of the first year, students may apply for transfer through the Department of Sculpture, Ceramics and Fibres. Acceptance into these Majors is based on accomplishment and potential in the area of concentration and the student's academic performance at Concordia.

Art C200 is a prerequisite for all studio art courses and is included in the 90 credits required for the BFA degree. Exemption from Art C200 is granted to students with the recommended background in studio art in the CEGEP and to those presenting acceptable portfolios to the Faculty Portfolio Committee (81.10.5). When exemption is granted, Art C200 is replaced within the 90 credits by an appropriate Studio Art elective.

NOTE: Students are required to bear the cost of materials in Studio Art courses.

Art:

For course descriptions, please see Department of Painting and Drawing, §81.110.

Ceramics:

CERA C230 ***Ceramics I*** (6 credits)
Prerequisite: Art C200 or exemption. An introduction to clay as an art medium employing the various techniques of forming, shaping and decorating for firing and glazing. *NOTE A/See §200.3*

CERA C330 ***Ceramics II*** (6 credits)
Prerequisite: Ceramics C230. An advanced course in technical and historical research in various ceramic processes with an emphasis on glaze technology and the use of different clay bodies. *NOTE A/See §200.3*

CERA 398 ***Special Topics in Ceramics*** (3 credits)
Prerequisite: Written permission of the Department of Sculpture, Ceramics and Fibres and third-year standing*. A workshop-seminar, providing an opportunity for the study of specialized aspects of Ceramics. *NOTE C/See §200.3*
**fewer than 33 credits remaining in the degree programme.*

CERA C430 ***Ceramics III*** (6 credits)
Prerequisite: Ceramics C330. The development of a body of personal work and a refinement of specific problems in clay.

CERA C450 ***Independent Study*** (6 credits)
Prerequisite: Written permission of the Department and third-year standing*. This workshop provides the opportunity for a limited number of students to independently pursue advanced studies in ceramics. *NOTE A/See §200.3*
**fewer than 33 credits remaining in the degree programme.*

Fibres:

FBRS C240 ***Fibre Structures I*** (6 credits)
Prerequisite: Art C200 or exemption. The use of various processes of fibre construction as art: loom and non-loom weaving, basketry, spinning, dyeing, and primitive fibre techniques. Consideration is given to the history of the styles, materials, methods and techniques of textiles. *NOTE A/See §200.3*

FBRS C260 ***Printed and Dyed Textile Design I*** (6 credits)
Prerequisite: Art C200 or exemption. Silk screen printing, block printing, batik and resist dyeing as these apply to design for yardage, compositional hangings and soft sculpture. The emphasis is on drawing, 2-dimensional design and creative exploration in mixed printing and dyeing media.

FBRS C340 ***Fibre Structures II*** (6 credits)
Prerequisite: Fibres C240. Structural processes in two-dimensional and three-dimensional form with equal emphasis on loom and off-loom techniques. Dyeing methods such as ikat, printing and painting on warps are included.

FBRS C360 ***Printed and Dyed Textile Design II*** (6 credits)
Prerequisite: Fibres C260. An advanced course in surface design with emphasis on xerox and photo processes as they relate to textiles. Special attention is given to problems such as weight and tension in relief, sculptural forms, and optical illusions. Traditional techniques such as quilting, piecing and trapunto are explored.

FBRS 398 ***Special Topics in Fibres*** (3 credits)
Prerequisite: Written permission of the Department. A workshop-seminar course providing an opportunity for study of specialized aspects of fibres. *NOTE C/See §200.3*

FBRS C440 ***Fibre Structures III*** (6 credits)
Prerequisite: Fibres C340. The refinement of specific problems in fibre structures with an emphasis on the unique direction of each student's work through both group and individually designed projects.

FBRS C450 ***Independent Study*** (6 credits)
Prerequisite: Written permission of the Department and third-year standing*. This workshop provides the opportunity for a limited number of students to independently pursue advanced studies in Fibres.
**fewer than 33 credits remaining in the degree programme.*

FBRS C460 ***Printed and Dyed Textile Design III*** (6 credits)
Prerequisite: Fibres C360. The recent developments in soft sculpture and three-dimensional use of fibres, including the use of synthetic materials such as latex and plastics, as well as natural fibre, cloth and paper. Conventional techniques such as armature building and mold making are included as they apply to extending the possibilities of form in soft materials.

FBRS C470 ***Papermaking: Process and Assemblage*** (6 credits)
Prerequisite: Twenty-four credits in Studio Art. The making and use of paper as related to the visual arts. The course examines the physical and structural possibilities of paper, as well as impression, assemblage and surface use.

Sculpture:

SCUL C200 ***Sculpture I*** (6 credits)
Prerequisite: Art C200 or Art C200 exemption. An investigation into the modes of expression in sculpture through a variety of contemporary and traditional materials and methods including casting, modelling, construction and welding. *NOTE A/See §200.3*

SCUL C300 ***Sculpture II*** (6 credits)
Prerequisite: Sculpture C200. Investigation into materials and methods emphasizing an individual form of study. The development of concepts and their application, imagination and vocabulary is essential. *NOTE A/See §200.3*

SCUL 398 ***Special Topics in Sculpture*** (3 credits)
Prerequisite: Written permission of the Department of Sculpture, Ceramics and Fibres and third-year standing*. A workshop-seminar course providing an opportunity for the study of specialized aspects of Sculpture. *NOTE C/See §200.3*
**fewer than 33 credits remaining in the degree programme.*

SCUL C400 ***Sculpture III*** (6 credits)
Prerequisite: Sculpture C300. Advanced investigation into a single or group of concepts and materials through the development of a body of personal work. *NOTE A/See §200.3*

SCUL C450 ***Independent Study*** (6 credits)
Prerequisite: Written permission of the Department of Sculpture, Ceramics and Fibres and third-year standing.* This course provides the opportunity for a limited numbers of students to pursue advanced studies in sculpture. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree programme.*

SCUL C465 ***Aesthetics of Sculpture*** (6 credits)
Prerequisite: Enrolment in the Major in Sculpture, in Ceramics or in Fibres; or written permission of the Department of Sculpture, Ceramics and Fibres. A study of selected works emphasizing unique achievements in sculpture; including field trips, studio visits and presentations by visiting artists.

SCUL C490 ***Spatial Relationships*** (6 credits)
Prerequisite: Enrolment in the Major in Sculpture, in Ceramics or in Fibres; or written permission of the Department of Sculpture, Ceramics and Fibres. A studio course providing an opportunity for the study of specialized aspects of space manipulation as it relates to sculpture.

81.140 Theatre

Chairman
G. GROSS, *Associate Professor*

Associate Professors
R. ALLISON
J. CAZALET
B. MACKAY
W. REZNICEK
K. SLOAN
P. SPENSLEY

Assistant Professors
V. KAELIN
E. MONGERSON

Lecturer
N. ALLISON

Students are responsible for fulfilling their particular degree requirements; hence, the following sequence must be read in conjunction with §81.20.

The superscript indicates credit value.

NOTE: For detailed information regarding procedures for admission to the Theatre programmes, potential students should contact the Department before March 15th (§81.10.9). Applicants normally are accepted as Majors in Theatre their first year.

72 **BFA Honours in Theatre Scenography**
- 33 Scenography C201[3], C211[3], C212[3], C221[3], C312[3], C350[6], C411[3], C412[3], C430[6]
- 12 Scenography C302[3], C303[3], C306[3], C307[3], C311[3], C321[3], C322[3], C323[3], 498[3]
- 9 Theatre C216[3], C316[3], C416[3]
- 9 Production C201[3], C311[3], C411[3]
- 3 Theatre Performance C211[3]
- 6 Art History electives, chosen in consultation with adviser

72 **BFA Specialization in Theatre Performance**
- 9 Theatre C216[3], C316[6], C416[3]
- 6 Production C311[3], C411[3]
- 33 Theatre Performance C211[3], C212[3], C213[3], C214[3], C215[3], C216[3], C311[3], C312[3], C313[3], C411[3], C412[3]
- 3 Theatre Performance C315[3], C316[3], C413[3], C414[3], C417[3]
- 3 Scenography C201[3]
- 12 Department of Theatre electives
- 6 Dance C240[6] (or elective in Dance)

60 **BFA Specialization in Drama in Education**
- 12 Drama in Education C200[6], C301[3], C302[3]
- 6 Drama in Education C412[3], C413[3], C420[6]
- 30 Scenography C201[3], C221[3], Theatre C216[3], C316[3], C317[3], C411[3], Theatre Performance C211[3], C212[3], C223[3], C224[3]
- 3 Theatre C412[3] or, with written permission of the coordinator of the Specialization in Drama in Education, Theatre C405[3]
- 3 Theatre Production electives
- 6 Department of Theatre electives

The programme, in combination with selected electives from other departments in the university, will prepare students for work in theatre for children; or for community drama work with children or adults in institutional settings such as hospitals, sheltered workshops, and senior citizens homes; or for careers in teaching. In order to qualify as a drama teacher in schools, a diploma year at an accredited institution for teaching certification is required beyond the BFA degree.

The programme is an acceptable prerequisite for graduate work in drama therapy.

60 **BFA Major in Theatre**
- 9 Scenography C201[3], C211[3], C221[3]
- 6 Electives in Scenography
- 12* Theatre Performance C211[3], C212[3], C223[3], C224[3]
- 6 Electives in Production**
- 9 Theatre C216[3], C316[3], C416[3]
- 9 Theatre C317[3], C321[3], C322[3], C411[3], C412[3], Theatre Performance C306[3], C307[3]
- 9 Electives in courses offered by the Department of Theatre. The requirement may, with written permission of the Department of Theatre, be waived for students who demonstrate programme objectives best served otherwise.

**Part-time students may substitute Theatre Performance C201 and C202 for Theatre Performance C211 and C212.*

***With written permission of the Department of Theatre, part-time students may substitute a Department of Theatre elective for 3 credits in Theatre Production.*

30 **Minor in Theatre**
- 6* Theatre C216[3], C316[3]
- 6 Drama in Education, Theatre Performance, and/or Theatre Scenography electives
- 18 Department of Theatre electives

**Students following this programme as*

part-time students in the evening may substitute Theatre C300[6].

CERTIFICATE IN CREATIVE DRAMA AND CREATIVE ARTS

The Department of Theatre offers a Certificate in Creative Drama and Theatre Arts (with Elementary and Secondary options) for the professional development of teachers. The programmes are designed in accordance with the guidelines of the Québec Ministry of Education. The courses concern both practice and theory and are conducted as workshops and seminars. By recognizing the general educational utility of creative drama and, where appropriate, its many applications to the study of theatre arts, the overall programme integrates the study of these two fields. Pattern B (Elementary) concentrates more on creative drama than does Pattern A (Secondary) in which the focus is shifted somewhat towards Theatre Arts.

Admission Requirements

Entry into the programme requires the candidate to be legally qualified to teach or be engaged in teaching.

In some cases, where teachers have completed studies similar to those of this programme, the Faculty of Fine Arts may also allow pro tanto credits up to a maximum of 12. These courses must not have been applied to a previous degree or certificate.

30	**Certificate in Creative Drama and Theatre Arts Secondary—Pattern A**
6	Drama in Education C200[6]
3	Drama in Education C402[3]
6	Drama in Education electives chosen in consultation with adviser
6	Theatre Performance C201[3], C202[3], C222[3], C223[3]
3	Scenography C201[3]
6	Theatre electives

30	**Certificate in Creative Drama and Theatre Arts Elementary—Pattern B**
6	Drama in Education C200[6]
12	Drama in Education electives chosen in consultation with adviser
3	Drama in Education C401[3]
6	Theatre Performance C201[3], C202[3], C222[3], C223[3]
3	Theatre electives

Theatre:

THEA C216 ***Theatre Studies I/Production Colloquium*** (3 credits)
An introduction to theatre studies, including an overview of theatre history through an examination of representative types of dramatic works and production practices of important periods. These studies prepare students for the Department's "Production Colloquia". Students *are required to attend weekly meetings of "Production Colloquia". NOTE A/See §200.3*

THEA C300 ***Theatre History*** (6 credits)
A study of the development of the physical stage and representative theoretical and dramatic works within their social context from pre-history to the present. Where appropriate, screenings of plays representing the periods under study. *NOTE A/See §200.3*

THEA C301 ***Canadian Theatre*** (3 credits)
The development of theatre in Canada and the study of selected Canadian plays in text and performance. Topics include amateur and professional theatre, the emergence of theatre programmes in schools and universities, regionalism, the cultural boom of the Sixties and the development of such institutions as festivals, arts councils, and national and local theatre organizations. *NOTE A/See §200.3*

THEA C316 ***Theatre Studies II/Production Colloquium*** (3 credits)
Prerequisite: THEA C216. An examination of approaches to theatre production. Topics include systematic methods for the interpretation of theatre scripts and the derivation of production concepts in modes useful to designers, directors and performers. Documents concerned with notable productions in the history of the theatre are discussed in conjunction with problems of contemporary theatre productions. Course content in this course is related to departmental productions and attendance at weekly "Production Colloquia" is required.

THEA C317 ***Stage Management*** (3 credits)
Prerequisite: Second-year standing* or written permission of the Department of Theatre. The key role of a stage manager in theatrical production from audition through closing. Topics for consideration include organizational techniques, prompt-book construction and use, scheduling, personnel supervision and the "running" of a show.
**fewer than 66 credits remaining in degree programme*

THEA C321 ***Theatre Administration I*** (3 credits)
An introduction to theatre administration including theatre organization and management, budgeting, box office operation, publicity and public relations. *NOTE A/See §200.3*

THEA C322 ***Theatre Administration II*** (3 credits)
Prerequisite: THEA C321 or permission of the Department of Theatre. A continuation of THEA C321 with additional topics introduced such as financing, contracting, taxation and touring. *NOTE A/See §200.3*

THEA C401 ***Quebec Theatre*** (3 credits)
Students should have a working knowledge of French. A study of selected plays of Quebec writers within their cultural milieu. Attendance at both French and English language performances is required. Guest speakers involved in Quebec theatre are invited to supplement lectures. *NOTE A/See §200.3*
NOTE: Students should have a working knowledge of French.

THEA C402 ***Seminar in Theatre Theory and Criticism*** (3 credits)
Prerequisite: THEA C316 previously or concurrently, or THEA C300. The examination of theatre theory and concepts of criticism.

THEA C405 ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects supervised by a Faculty member. Students are required to submit a paper based on their investigation. *NOTE C/See §200.3*

THEA C411 ***Directing I*** (3 credits)
Prerequisite: Written permission of the Department of Theatre. Examination of and experimentation in staging and production organization. Exercises in visual, structural and conceptual analysis. *NOTE A/See §200.3*

THEA C412 ***Directing II*** (3 credits)
Prerequisite: THEA C411 or exemption and written permission of the Department of Theatre. Students direct short plays for studio presentation. Lectures and independent research. *NOTE A/See §200.3*

THEA C415 ***Independent Study II*** (3 credits)
Prerequisite: THEA C405 and written permission of the Department of Theatre. Continuation of THEA C405. Students who have taken THEA C405 register for THEA C415 for additional credits.

THEA C416 ***Theatre Studies III/Production Colloquium*** (3 credits)
Prerequisite: Theatre C316 or C300. Research, planning and presentation of projects in conjunction with preparations for Department productions. A broad context for this course is provided by specialists from various fields who examine the historical and cultural backgrounds for plays in production.

THEA C420 ***Playwriting Workshop*** (6 credits)
Prerequisite: Written permission of the Department of Theatre. Study of existing methods of playwriting in relation to stage production. Emphasis is on the creative work of the student guided by the criticism of the class and the instructor in the process of stage realization. Promising scripts will receive workshop production. *NOTE A/See §200.3*

THEA 498 ***Topics in Theatre Studies*** (3 credits)
Prerequisite: THEA C316 previously or concurrently; THEA C300, or written permission of the Department of Theatre. Studies in selected topics in theatre. Topics may include study of a genre, period, individual playwright, nation.

Drama in Education:

DINE C200 ***Developmental Drama*** (6 credits)
Prerequisite: Enrolment in the Specialization in Drama in Education or written permission of the Department of Theatre. Theory and practice of developmental drama. Opportunities are provided for practical work in the creation of original stories and improvised role plays. Discussion of the dynamics, creative processes and teaching methods in primary and secondary school is included. *NOTE A/See §200.3*

DINE C201 ***Drama in Early Childhood Education*** (3 credits)
Prerequisite: Enrolment in the Specialization in Early Childhood Education, or the Major in Child Studies, or written permission of the Department of Theatre. Focuses on the development of the participants' fluency and flexibility in imaginative expression, on theories about the nature and value of dramatic play, on the implementation of drama curricula for young children. Included are sensory stimulation, imitative role play, make-believe with objects and actions, spontaneous improvisation.

DINE C202 ***Stories for Children*** (3 credits)
Prerequisite: Drama in Education C200, or C201, or 6 credits in Theatre Performance, or written permission of the Department of Theatre. Focuses on the development of the participants' skills in reading and telling stories, on the creation and evaluation of new stories, on methods of using children's literature as a basis for dramatic play.

DINE C301 ***Drama Experiences for Children*** (3 credits)
Prerequisite: Drama in Education C200 or written permission of the Department of Theatre. Design and preparation of classroom work in drama for children. Topics may include the creation of environments for story-telling and role playing, and the use of drama to teach other subjects.

DINE C302 ***Drama in Experiences for Special Populations*** (3 credits)
Prerequisite: Drama in Education C301 or written permission of the Department of Theatre. Design and preparation of appropriate drama or theatre activities for individuals requiring some form of institutionalized care, such as the hospitalized, the handicapped or adolescents in group homes.

DINE C401 ***Supervised Internship—Elementary Level*** (3 credits)
Prerequisite: Written permission of the Department of Theatre. Students teach a curriculum unit which uses drama methods in an elementary setting. The students are supervised and their teaching performance is evaluated on selected criteria related to teaching competence and professional behaviour.

DINE C402 ***Supervised Internship—Secondary Level*** (3 credits)
Prerequisite: Written permission of the Department of Theatre. Students teach a curriculum unit in creative drama or theatre arts at the secondary level. The students are supervised and their teaching performance is evaluated on selected criteria related to teaching competence and professional behaviour.

DINE C412 ***Introduction to Children's Theatre*** (3 credits)
Prerequisite: Drama in Education C200 or written permission of the Department of Theatre. Theories of stage preparation for the child audience. The study of scripts, performance styles, as well as special conditions and responsibilities relating to children's theatre are included. *NOTE A/See §200.2*

DINE C413 ***Children's Theatre Production*** (3 credits)
Prerequisite: Drama in Education C412 or written permission of the Department of Theatre. Research and practical work in the collaborative process of developing a piece of children's theatre. *NOTE A/See §200.3*

DINE C420 ***An Introduction to Drama Therapy*** (6 credits)
Prerequisite: Drama in Education C302 or permission of the Department of Theatre. Lectures and workshops which examine the philosophical and historical foundations of drama and theatre in therapy.

DINE 498 ***Special Topics in Drama in Education I*** (3 credits)
Prerequisite: Written permission of the Department of Theatre. This course provides opportunity for the study of specialized aspects of Drama in Education. *NOTE A,C/See §200.3*

Production:

NOTE: Conditions of access to courses and scheduling:
1. All assignments or roles are given after interview or audition.
2. No student may register for more than 3 credits in production courses in any one academic year.
3. Before registering for Production courses, students must make sure they are free to attend all rehearsals or crew calls according to the schedules published each session by the Department of Theatre.

PROD C201 ***Theatre Production I*** (3 credits)
Prerequisite: Enrolment in the Major in Theatre, or written permission of the Department of Theatre. Students complete assignments in the area of Theatre Scenography. *NOTE A/See §200.3*

PROD C301 ***Theatre Production*** (3 credits)
Prerequisite: Second-year standing* in a University degree programme and written permission of the Department of Theatre. Students are assigned tasks in scenography, performance or front-of-house.
**fewer than 66 credits remaining in a degree programme.*
NOTE: Students enrolled in a programme in the Department of Theatre may not take this course for credit towards their degree programme.

PROD C308 ***Supervised Internship I*** (3 credits)
Prerequisite: Second-year standing* in a programme of the Department of Theatre and written permission of the Department of Theatre. An opportunity for students to obtain credit for work completed for a recognized theatre under the joint supervision of a qualified professional and full-time faculty member. Students repeating C308 register under C309 for credit.
**fewer than 66 credits remaining in degree programme.*

PROD C309 ***Supervised Internship II*** (3 credits)
Prerequisite: Production C308 and written permission of the Department of Theatre. A continuation of Production C308. A student repeating Production C308 register for Production C309 for credit.

PROD C311 ***Theatre Production II*** (3 credits)
Prerequisite: Audition and written permission of the Department of Theatre; second-year standing* in a programme in the Department of Theatre; or written permission of the Department of Theatre. Students complete assignments in the area of Theatre Scenography or Performance. *NOTE A/See §200.3*
**fewer than 66 credits remaining in degree programme.*

PROD C411 ***Theatre Production III*** (3 credits)
Prerequisite: Audition and written permission of the Department of Theatre; third-year standing* in a programme in the Department of Theatre; or written permission of the Department of Theatre. Students complete assignments in the area of Theatre Scenography or Performance. *NOTE A/See §200.3*
**fewer than 33 credits remaining in degree programme.*

Scenography:

SCEN C201 ***Introduction to Scenography*** (3 credits)
The basic functions of scenography, its history, principal organizational schemes, methods and materials. Lectures and demonstrations are supplemented by readings, research and projects. Students attend workshops on theatre make-up or other specific areas of interest in the field of scenography. *NOTE A/See §200.3*

SCEN C211 ***Theatre Graphics*** (3 credits)
Prerequisite: Scenography C201 previously or concurrently, and written permission of the Department of Theatre. Studio work in the basic methods of graphic communication used in Theatre Scenography. Technical drawing, perspective drawing, pattern drafting and rendering techniques are included.

SCEN C212 ***Scenography Workshop I*** (3 credits)
Prerequisite: Scenography C201, previously or concurrently, concurrent registration in Scenography C211, and written permission of the Department of Theatre. A practical introduction to the tools, equipment, materials and procedures utilized in theatre lighting, scenery construction, costume technology and properties construction.

SCEN C221 ***Theatre Technology I*** (3 credits)
An introduction to theatre technology with an emphasis on the physical theatre, its equipment and basic techniques, and on concepts of scenographic technology. *NOTE A/See §200.3*

SCEN C302 ***Theatre Lighting Technology*** (3 credits)
Prerequisite: Scenography C201, and written permission of the Department of Theatre. The theory and practical applications of lighting technology, including instrumentation, colour, control and design methodology. *NOTE A/See §200.3*

SCEN C303 ***Advanced Theatre Technology*** (3 credits)
Prerequisite: Scenography C221 or written permission of the Department of Theatre. Problems in structural analysis, strength of materials, hydraulics, pneumatics and mechanics relating to scenography for the theatre.

SCEN C305 ***Independent Study I*** (3 credits)
Prerequisite: Written permission of the Department of Theatre. Credit granted for independent projects in scenography supervised by a faculty member.

SCEN C306 ***Stage Properties Technology*** (3 credits)
Prerequisite: Scenography C221 or written permission of the Department of Theatre. Studio work in the design and construction of properties and accessories for theatre production

SCEN C307 ***Scene Painting Technology*** (3 credits)
Prerequisite: Scenography C221 or written permission of the Department of Theatre. Studio work in the materials and technology of painting for the theatre.

SCEN C311 ***Scenographic Presentation Techniques*** (3 credits)
Prerequisite: Scenography C212 or written permission of the Department of Theatre. Studio work in the construction of maquettes, rendering techniques for scenery, lighting, and costumes for the theatre.

SCEN C312 ***Scenographic Workshop II*** (3 credits)
Prerequisite: Scenography C212, or written permission of the Department of Theatre. A continuation of Scenography C212. Additional topics include metals, plastics, and maskmaking.

SCEN C321 ***Costume Technology I*** (3 credits)
Prerequisite: Scenography C221 or written permission of the Department of Theatre. Materials, equipment, techniques and procedures utilized in the construction of theatre costumes. Emphasis is on patterning, draping and basic construction methods.

SCEN C322 ***Costume Technology II*** (3 credits)
Prerequisite: Scenography C221 or written permission of the Department of Theatre. Materials, equipment, techniques and procedures of theatre costumes. Emphasis is on buckram and frame techniques for use in construction of hats, costumes, and masks for the theatre.

SCEN C323 ***Costume History*** (3 credits)
An historical survey of fashion and theatrical costumes in which the relationship between the two is examined with an appreciation of cultural contexts. Although emphasis is on European fashion and

costume, students also work on specific topics which may include non-European dress and ethnic fashion or theatrical costumes.

SCEN C350 ***Seminar in Contemporary Design Theory*** (6 credits)
Prerequisite: Scenography C212, and six credits from Scenography C302, C303, C306, C307; or written permission of the Department of Theatre. A consideration of the function and scope of scenography through a study of contemporary approaches to test analysis, research, and image development for the scenographer. Students work with a variety of styles, genres and periods. *NOTE A/See §200.3*

SCEN C411 ***Scenographic Design Projects*** (3 credits)
Prerequisite: Scenography C311, C350, enrolment in the Honours in Theatre Scenography, and written permission of the Department of Theatre. Advanced Scenography design projects. Students may concentrate in technology, scenic design, costume design or lighting design projects.

SCEN C412 ***Scenography Workshop III*** (3 credits)
Prerequisite: Scenography C312 and written permission of the Department of Theatre. A continuation of Scenography C312.

SCEN C430 ***Scenography Portfolio Development*** (6 credits)
Prerequisite: Third-year standing* in Honours in Theatre Scenography. Students develop portfolios in technology, lighting, costume, scenic design.
**fewer than 33 credits remaining in degree programme.*

SCEN 498 ***Special Topics in Scenography*** (3 credits)
Prerequisite: Scenography C221 or written permission of the Department of Theatre. Selected topics in scenography. Topics vary depending on instructor and student interest. Topics might include sound, computers in the theatre, or special areas of technology or design in scenery, lighting or costumes. *NOTE A,C/See §200.3*

Theatre Performance:

TPER C201 ***Acting I*** (3 credits)
Emphasis on developing imagination and physical expression, including basics of improvisation. Preparation of scenes and play excerpts for class study. *NOTE A/See §200.3*

TPER C202 ***Acting II*** (3 credits)
Prerequisite: Theatre Performance C201 or written permission of the Department of Theatre. Preparation for the role, including scene and character analysis, and the continued development of imagination and expression. Focus is on the presentation of scenes from plays. *NOTE A/See §200.3*

TPER C211 ***Ensemble I*** (3 credits)
Prerequisite: Enrolment in a programme in the Department of Theatre. Students work on the elements of preparation for theatrical presentation. Emphasis is on the cooperative nature of theatre and an understanding of the integration of performance and scenographic elements. Studio work includes instruction in sensory awareness, performer-audience relationships, spatial relationships and improvisational techniques. The laboratory component consists of preparation of material studied during the studio sessions.

TPER C212 ***Ensemble II*** (3 credits)
Prerequisite: Theatre Performance C211 and enrolment in a programme in the Department of Theatre. A continuation of Theatre Performance C211 with increased emphasis on language and text.

TPER C213 ***Performance Workshop I*** (3 credits)
Prerequisite: Theatre Performance C211 concurrently. Specialized workshop in specific performance related techniques which may include: neutral mask, expressive mask, juggling-timing-rhythm, period dance, Alexander Technique, stage combat.

TPER C214 ***Performance Workshop II*** (3 credits)
Prerequisite: Theatre Performance C213 and C212 concurrently. A continuation of Theatre Performance C213.

TPER C215 ***Voice Studio I*** (3 credits)
Prerequisite: Theatre Performance C211 concurrently. An introduction to voice, speech and singing skills. Vocal production, articulation, phrasing, and language analysis are taught in studio and laboratory sessions. Private tutorials dealing with selected skills in voice and speech for the performer are included.
NOTE: Students are expected to bear certain costs in relation to this course.

TPER C216 ***Voice Studio II*** (3 credits)
Prerequisite: Theatre Performance C215, and Theatre Performance C212 concurrently. A continuation of Theatre Performance C215.
NOTE: Students are expected to bear certain costs in relation to this course.

TPER C223 ***Fundamentals of Voice, Speech and Movement I*** (3 credits)
Prerequisite: Enrolment in the Major or Minor in Theatre, the Specialization in Drama in Education, or written permission of the Department of Theatre. Development of the actor's instrument through the integration of body movement and voice. Emphasis is on movement, comprising exercises for vocal and physical flexibility, relief from tension, the expressive use of gesture and body composition, vocal support and speech mechanics.

TPER C224 ***Fundamentals of Voice, Speech and Movement II*** (3 credits)
Prerequisite: Theatre Performance C223. A continuation of Theatre Performance C223, with increased emphasis on speech processes.

TPER C306 ***Acting III*** (3 credits)
Prerequisite: Theatre Performance C202 or C212. An in-depth study of the development of character within the context of the play. Script analysis, interpretation, and physical/vocal characterization are included. Students are required to present scenes from selected plays.

TPER C307 ***Acting IV*** (3 credits)
Prerequisite: Theatre Performance C306. Continuation of character study, moving towards the examination of non-realistic performance styles. The presentation of scenes from selected plays is required.

TPER C311 ***Ensemble III*** (3 credits)
Prerequisite: Theatre Performance C212 and written permission of the Department of Theatre. A continuation of Theatre Performance C212 with emphasis on principles of characterization in various dramatic genre: elements of rhythm, physical and vocal attitude, language, related improvisation techniques.

TPER C312 ***Ensemble IV*** (3 credits)
Prerequisite: Theatre Performance C311. A continuation of Theatre Performance C311.

TPER C313 ***Performance Workshop III*** (3 credits)
Prerequisite: Theatre Performance C214 and written permission of the Department of Theatre. A continuation of Theatre Performance C214.

TPER C315 ***Voice Studio III*** (3 credits)
Prerequisite: Theatre Performance C216, concurrent enrolment in Theatre Performance C311 and written permission of the Department of Theatre. A continuation of Theatre Performance C216 with greater emphasis on shaping patterns of speech, use of language for character development and an introduction of dialects and accents. Private tutorial dealing with specific elements of speech and voice for the performer is included.
NOTE: Students are expected to bear certain costs for this course.

TPER C316 ***Voice Studio IV*** (3 credits)
Prerequisite: Theatre Performance C315 and concurrent enrolment in Theatre Performance C312. A continuation of Theatre Performance C315.
NOTE: Students are expected to bear certain costs for this course.

TPER C411 ***Ensemble V*** (3 credits)
Prerequisite: Theatre Performance C312, C313. A continuation of Theatre Performance C312. Focuses on acting styles as they relate to audience-performer relationships in dramatic genre and periods.

TPER C412 ***Ensemble VI*** (3 credits)
Prerequisite: Theatre Performance C411. A continuation of Theatre Performance C411.

TPER C413 ***Performance Workshop IV*** (3 credits)
Prerequisite: Theatre Performance C313. A continuation of Theatre Performance C313. The study of special performance techniques such as: musical theatre (singing and dancing), clown, *Commedia dell'Arte*, and mime. Voice coaching by private tutorial for specific roles is included.
NOTE: Students are expected to bear certain costs for this course.

TPER C414 ***Performance Workshop V*** (3 credits)
Prerequisite: Theatre Performance C413 and Theatre Performance C412 concurrently or written permission of the Department of Theatre. A continuation of Theatre Performance C413. Voice coaching by private tutorial for specific roles is included.
NOTE: Students are expected to bear certain costs for this course.

TPER C417 ***Audition and Resumé Preparation*** (3 credits)
Prerequisite: Third-year standing* in the Specialization in Theatre Performance or written permission of the Department of Theatre. Techniques for auditioning, preparation of resumé and the business aspects of the performer's work in the professional theatre.
**fewer than 33 credits remaining in degree programme.*

TPER 498 ***Special Topics in Theatre Performance*** (3 credits)
Prerequisite: Written permission of the Department of Theatre. Provides opportunities for studies in selected styles or modes of theatre performance. *NOTE C/See §200.3*

100 Faculty

100 Faculty

FULL TIME

ABRAMI, P., BA *Bard Coll.*, MA PhD *Manit.*, *Associate Professor of Education*

ABRAR, M.B., BA MA *Amer. U., Cairo*, MA *McM., Lecturer in Economics*

ACHESON, P., BA *Lond.*, MS PhD *Indiana*, *Associate Professor of Applied Linguistics*

ACLAND, C.D., BComm MBA *Qu.*, PhD *U. of N. Carolina, CA*, *Professor of Accountancy*

ADAMS, F.G.W., BA MA *Tor.*, PhD *Chic.*, *Associate Professor of History*

ADAMS, L., BMus *Boston*, Cert *Royal Conserv., The Hague*, *Assistant Professor of Fine Arts (Music)*

ADAMSON, A.H., BA *Manit.*, PhD *Lond.*, *Professor of History*

ADLER, L.S., BA *Sir G. Wms.*, MA *McG.*, SM *M.I.T.*, *Associate Professor of Mathematics*

ADLEY, T.J., BSc *Sir G. Wms.*, PhD DIC *Lond.*, *Associate Professor of Chemistry*

AHMAD, A., BComm *C'dia.*, MBA *McG.*, *Lecturer in Finance*

AHMAD, J., BA *Alig.*, MS *Pitt.*, PhD *M.I.T.*, *Professor of Economics*

AHMAD, M.M., MA *Punj.*, MA PhD *Chic.*, *Associate Professor of Philosophy*

AHMAD, M.O., BEng *Sir G. Wms.*, BSc *Alld.*, DEng *C'dia.*, *Associate Professor of Electrical Engineering*

AHMED, S.W., BComm MA *Sind*, MBA *C'dia.*, *Sessional Lecturer in Quantitative Methods*

AHSAN, S.M., BA *Dacca*, MA *Essex*, PhD *McM., Associate Professor of Economics*

AIKEN, S.R., BA *Belf.*, MA *McM.*, PhD *Penn. State*, *Associate Professor of Geography*

ALAGAR, V.S., BA MSc *Madr.*, MA *N.Y. State*, PhD *McG., Associate Professor of Computer Science*

ALAM, M.S., BA *Dacca*, MA *Karachi*, MA PhD *W.Ont., Visiting Associate Professor of Economics*

ALBERT, P.J., BSc PhD *New Br.*, *Associate Professor of Biology*

ALCOCK-GALL, S., BComm MBA *C'dia.*, *Lecturer in Finance*

ALI, S.T., BSc MSc *Dacca*, MS PhD *Roch.*, *Associate Professor of Mathematics*

AL-KHALILI, A.J., *Associate Professor of Electrical Engineering*

ALLEN, Sr. P., A.S.M., BA *Roch.*, PhD *Claremont*, *Associate Professor of Philosophy*

ALLEN, R., MFA MA *Cornell*, *Associate Professor of English*

ALLISON, N., BA *Converse Coll.*, MA *Calif.*, *Lecturer in Fine Arts (Theatre)*

ALLISON, R.R., BA MA *Calif.*, PhD *Flor. State*, *Assistant Professor of Fine Arts (Theatre)*

ALLOR, M., BA *Oakland*, PhD *Ill.*, *Assistant Professor of Communication Studies*

ALTMAN, M., BA MA PhD *McG.*, *Assistant Professor of Economics*

ALVI, S.A., BA MA *Karachi*, PhD *Colo.*, *Associate Professor of Economics*

AMIT, Z., BA PhD *McG.*, *Professor of Psychology*

ANAND, K.K., BA *Punj.*, MA *Delhi*, PhD *N.Y.*, *Associate Professor of Mathematics*

ANASTASOPOULOS, A., BA *Athens*, MA PhD *Roch.*, *Associate Professor of Economics*

ANDERSON, J.M., MA *Dund.*, MSc *Alta.*, *Assistant Professor of Geography*

ANDERSON, P.D., BA MSc *W. Ont.*, PhD *Ore. State*, *Associate Professor of Biology*

ANDRES, D.H., BA MA *Texas*, PhD *Wat.*, *Associate Professor of Psychology*

ANDRUS, D.F.P., BA MA *Tor.*, *Associate Professor of Fine Arts (Art History)*

ANGEL, R.B., MA PhD *McG.*, *Professor of Philosophy*

ANGELL, H.M., BA *Sir G. Wms.*, MA *McG.*, *Associate Professor of Political Science*

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ANVARI, M., BEng *McM.*, MBA *C'dia.*, MS PhD *Case Western Res.*, *Associate Professor of Quantitative Methods*

APPELBAUM, S., BS *Temple U.*, MA *St. Jos.*, PhD *Ott.*, *Professor of Management*

ARBUCKLE-MAAG, T.Y., BA *Manit.*, PhD *Tor., Professor of Psychology*

ARGHEYD, K., MBA *Iran Centre for Mana. Studies* PhD *Harv.*, *Assistant Professor of Management*

ARMSTRONG, M., BA BEd *Alta.*, MA *McG.*, *Professor of Economics*

ARNOPOULOS, P.J., BSc BA *Sir G. Wms.*, MA *N.Y.*, MA *Col.*, *Associate Professor of Political Science*

ASHTAKALA, B., BE *Madr.*, ME *Roor.*, PhD *Wat., Associate Professor of Civil Engineering*

ASHTAKALA, S.S., BSc *Mad.*, PhD *Tor.*, *Associate Professor of Biology*

ATWOOD, J.W., BEng *McG.*, MASc *Tor.*, PhD *Ill., Associate Professor of Computer Science*

AUCHINACHIE, G.M., BA *Br. Col.*, MA *Tor.*, PhD *Montr., Associate Professor of English*

AUSTIN, K., BMus MMA *McG., Assistant Professor of Fine Arts (Music)*

AZAR, S., BA *Norton*, MA *Roch.*, *Assistant Professor of Psychology*

BABA, V.V., BEng *Madr.*, MBA *W. Ill.*, PhD *Br. Col., Associate Professor of Management*

BABARIK, P., BA MA *Tor.*, PhD *Chic.*, *Associate Professor of Psychology*

BAGGALEY, J., BA PhD *Sheff.*, *Associate Professor of Education*

BALDWIN, M., BSc MSc *Tas.*, SM *Harv.*, *Associate Professor of Chemistry*
BALTHAZARD, P.A., BSc *McG.*, *Sessional Lecturer in Quantitative Methods*
BARAKETT, J., BA *Sir G. Wms.*, MA *McG.*, PhD *Montr.*, *Associate Professor of Education*
BARAN, B., BSc *McG.*, MSc *Wayne State U.*, *Assistant Professor of Quantitative Methods*
BARBIERI, B., BA *Montr.*, MBA *Col.*, BCL LLB *McG.*, *Assistant Professor of Marketing*
BARIBEAU, J., BA MPs MA PhD *Ott.*, *Assistant Professor of Psychology*
BARKMAN, B., BA *Middlebury Coll.*, PhD *Georgetown*, *Associate Professor of Applied Linguistics*
BARLOW, I.M., BA *Wales*, MA *Cinc.*, PhD *McG.*, *Associate Professor of Geography*
BARON, L.J., BA *McG.*, MA *Mich. State*, PhD *Tor.*, *Associate Professor of Education*
BARTON, C.R., BA MA *Yale*, PhD *N.Y.*, *Associate Professor of Classics and Linguistics*
BAUER, J.H., BA *Sir G. Wms.*, MA PhD *Manit.*, *Associate Professor of Psychology*
BAYNE, C.S., MA *Br. Col.*, PhD *McG.*, *Associate Professor of Quantitative Methods*
BECKMAN, C., AA *Stockton Coll.*, *Calif.*, AB MA *Calif.*, PhD *Rutgers*, *Associate Professor of Biology*
BECKWITH, D., AB MEd *Duke U.*, EdD *Indiana*, *Visiting Associate Professor of Education*
BEDARD, C., BSc *Laval*, MSc PhD *Imperial Coll.*, *Assistant Professor, Centre for Building Studies*
BEINER, S.C., BComm MBA *McG.*, RIA, *Lecturer in Accountancy*
BEISSEL, H.E., BPhil *Cologne*, MA *Tor.*, *Professor of English*
BELINSKY, M.M., BSc MSc *McG.*, PhD *Montr.*, *Associate Professor of Mathematics*
BELISLE, J., BA MA *Montr.*, *Associate Professor of Fine Arts (Art History)*
BELKIN, R., BA *Sir G. Wms.*, MA PhD *Montr.*, *Professor of English*
BELMORE, N., AB *Randolph-Macon*, MS PhD *Georgetown*, *Professor of Linguistics*
BENEDICT, D., BSc *C.U.N.Y.*, PhD *Grenoble*, *Executive-in-Residence, Management*
BERGIER, M.J., MBA PhD *SUNY, Buffalo*, *Associate Professor of Marketing*
BERNARD, R.M., BS MS *Tenn.*, PhD *Wash.*, *Associate Professor of Education*
BERTRAND, C.L., BA *Western Wash.*, MA *Ore.*, PhD *Wis.*, *Associate Professor of History*
BESSNER, L., BComm *McG.*, FCA, *Professor of Accountancy*
BHAT,R.B., BEng *Mys.*, MTech PhD *I.I.T.*, *Associate Professor of Mechanical Engineering*
BHATNAGAR, J.K., BSc LLB *Agra*, MA PhD *Lond.*, *Professor of Education*
BHATTACHARYYA, B.B., BTech MTech *Kharagpur*, PhD *N.S.T.C.*, *Professor of Electrical Engineering*
BIGELOW, R., BFA *Choinard Art Inst.*, *Associate Professor of Fine Arts (Sculpture, Ceramics and Fibres)*
BINDON, K., BA *Sir G. Wms.*, MA PhD *Qu.*, *Associate Professor of History*
BIRD, F.B., BA BD *Harv.*, PhD *G.T.U.(Berkeley)*, *Associate Professor of Religion*
BIRD, P.H., BSc PhD *Sheff.*, *Professor of Chemistry*
BLACH, A.E., BSc MEng *Sir G. Wms.*, PhD *Montr.*, Ing, *Assistant Professor of Mechanical Engineering*
BLAZOUSKE, J.D., BA BComm *Alta.*, MBA *Chic.*, FCA RIA FSMAC, *Professor of Accountancy*
BLOOM, R., BA *C.U.N.Y.*, MBA *Col.*, PhD *N.Y.*, *Professor of Accountancy*
BOBETIC, M.V., MA *Zagreb*, PhD *Wat.*, *Associate Professor of Mathematics*
BODE, F.A., BA *U.C.L.A.*, MA PhD *Yale*, *Associate Professor of History*
BOLDUC, P., *Assistant Professor of Fine Arts (Painting and Drawing)*
BOOM, H.J., BSc MSc *Manit.*, PhD *Wat.*, *Assistant Professor of Computer Science*
BOSWALL, M.A., BSc *Dal.*, *Associate Professor of Mathematics*
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SCHNEIDER, J.D., BA *Sir G. Wms.*, MA PhD *McG.*, *Associate Professor of Études Françaises*

SCHWARTZMAN, A., PhD *McG.*, *Professor of Psychology*

SCHWELB, O., DipEng *Bud.*, PhD *McG.*, *Associate Professor of Electrical Engineering*

SEAMAN, A.R., BA *Sir G. Wms.*, MEB *Springfield, Mass.*, *Lecturer in Leisure Studies*

SEENS, R.D., BA *S. Fraser*, MA PhD *Vic. B.C.*, *Associate Professor of Psychology*

SEGALOWITZ, N., BSc *McG.*, PhD *Oxf.*, *Associate Professor of Psychology*

SEGOVIA-ZAPIAIN, J.J., BComm *Guanajuato*, DEA PhD *Paris-Dauphine*, *Assistant Professor of Accountancy*

SELLERS, W.R., BS *Rhode Island*, MEd *Pitt.*, EdD *Boston*, *Associate Professor of Exercise Science*

SEN, J., BA *Calc.*, MA *Jad.*, MA PhD *Tor.*, *Assistant Professor of Management*

SENEZ, J.A., BSc *Manit.*, MSc *McG.*, *Professor of Mathematics*

SEPEHRI, M., BS *Arya-Mehr*, PhD *Stan.*, *Assistant Professor of Quantitative Methods*

SERAGANIAN, P., BA *McM.*, MA PhD *Dal.*, *Associate Professor of Psychology*

SERBIN, L.A., BA *Reed Coll.*, PhD *S.U.N.Y. (Stonybrook)*, *Professor of Psychology*

SERPONE, N., BSc *Sir G. Wms.*, PhD *Cornell*, *Professor of Chemistry*

SEVIGNY, P., BA BComm *Laval*, *Executive-in-Residence*

SHAMES, M.L., BA MA PhD *Manit.*, *Associate Professor of Psychology*

SHAPIRO, B., BA *Temple*, MSSc *Bryn Mawr*, *Sessional Lecturer in Management*

SHAPIRO, D., BA *Calg.*, MA PhD *Cornell*, *Associate Professor of Economics*

SHAPIRO, M., BA MA PhD *Tor.*, *Assistant Professor, Centre for Building Studies*

SHARMA, M., MEng MBA *McG.*, *Sessional Lecturer in Quantitative Methods*

SHARMA, R.C., MA MSc *Delhi*, PhD *Tor.*, *Associate Professor of Physics*

SHARMA, V.A., BA *Manc. Coll.*, MA MS PhD *Indiana*, *Assistant Professor of Applied Linguistics*

SHEETS-PYENSON, S., BA *Mich.*, PhD *Penn.*, *Sessional Lecturer in Science and Human Affairs Programme*

SHEPPARD, D., BA *McG.*, BA *Car.*, MA PhD *York*, *Assistant Professor of Sociology and Anthropology*

SHEPS, G.D., BA *Manit.*, MA *Cornell, Associate Professor of English*
SHERMAN, L., BA *Sir G. Wms.*, MA *N.Y., Professor of Fine Arts (Art Education)*
SHIN, J., BSc *Swarthmore Coll.*, MSc *Cornell, Associate Professor of Physics*
SHINGHAL, R., BE *Burd.*, MTech *Kan.*, MMath *Wat.*, PhD *McG., Associate Professor of Computer Science*
SHIZGAL, P., BA *McG.*, MA PhD *Penn., Professor of Psychology*
SHLOSSER, F.E., BA *Sir G. Wms.*, MA PhD *McG., Associate Professor of History*
SHULMAN, H., BA *Sir G. Wms.*, MA *Car., Associate Professor of Political Science*
SIDOROW, A.T., MA PhD *Montr., Associate Professor of Modern Languages (Russian)*
SIGGEL, E., DipIng *Berl.*, MA *Montr.*, PhD *Tor., Associate Professor of Economics*
SIMON, P., Ing Textile *Stras.*, MA PhD *Montr., Professor of Management*
SIMON, P., MA PhD *Montr., Professor of Adult Education*
SIMPKINS, H.J., BA *Sir G. Wms.*, MBA *C'dia., Sessional Lecturer in Marketing*
SIMS, W.B., BA MA PhD *Tor., Associate Professor of Economics*
SINGER, M., BA *Hunter*, MA PhD *Mich., Associate Professor of History*
SINGH, L.P., BA MA *Alld.*, PhD *Delhi and A.N.U., Professor of Political Science*
SKERRY, S., MA PhD *McG., Assistant Professor of Psychology*
SLACK, B., BA *Lond.*, MA PhD *McG., Associate Professor of Geography*
SLOAN, W.K., AOCA *Ont. Coll. of Arts, Associate Professor of Fine Arts (Theatre)*
SMITH, B.M., BA *Queen Mary*, MA *Laval*, MA *C'dia., Associate Professor of Applied Linguistics*
SMITH, I.H., BA *Sir G. Wms.*, MA PhD *McG., Associate Professor of History, and Russian Studies*
SMITH, R., BA *Montr.*, MSc *Tor.*, PhD *McG., Associate Professor of Mathematics*
SMITH, R., PhD *McG., Associate Professor of Education*
SMOLA, J., BComm BA *Sir G. Wms.*, MA PhD *Montr., Professor of Management*
SMUCKER, J., BA *Bluffton*, MA PhD *Mich. State, Associate Professor of Sociology*
SOMMER, R.J., BA *Minn.*, MA PhD *Harv., Associate Professor of English*
SONI, R., BPharm *B.I.T.S.*, MBA *C'dia., Sessional Lecturer in Quantitative Methods*
SORFLEET, J.R., BA MA *Manit.*, PhD *New Br., Associate Professor of English*
SORIC, J., BSc MSc *McM., Associate Professor of Mathematics*
SPENSLEY, P., BA *Wis.*, MA PhD *Wayne State, Associate Professor of Fine Arts (Theatre)*
SPICER, M., BA *Montr.*, MA *Inst. d'Et. Médievales, Montr.*, MA *McG.*, PhD *Ott.* PhD(Th) *Coll. Dom., Associate Professor of Theological Studies*
SPROULE, J.A., BA *Sir G. Wms.*, MpsSc *McG., Assistant Professor of Applied Social Science*
SRINIVASAN, S., BSc MSc *Madr.*, MS PhD *Case Western Res., Associate Professor of Quantitative Methods*
SRIVASTAVA, T., BSc MSc *Luck.*, PhD *Gorak., Associate Professor of Mathematics*
STATHOPOULOS, T., DipEng *Athens*, MESc PhD *W. Ont.*, PEng *Ont., Associate Professor, Centre for Building Studies*
STELCNER, M., BComm *McG.*, MA PhD *Syr., Associate Professor of Economics*
STEPANENKO, Y.A., BEng ME PhD *Moscow, Professor of Engineering*
STERN, R.J., BSc *Cooper Union*, MSc PhD *Northwestern, Associate Professor of Mathematics*
STEVENS, F., BA *Sir G. Wms.*, MA *C'dia.*, PhD *U. de Genève, Associate Professor of Education*
STEWART, J., BA *Qu.*, PhD *Lond., Professor of Psychology*
STONYER, A., BA *Lough. Coll. of Art and Des.*, AADipArch *Arch Assn., Lond.*, PhD *Leic. Poly., Assistant Professor of Fine Arts (Design)*
STORMS, R.K., BSc PhD *Alta., Assistant Professor of Biology*
SUEN, C.Y., BScEng MScEng *H.K.*, MASc PhD *Br. Col., Professor of Computer Science*
SUGDEN, L., BA BEd MA *Manit.*, Dd'U *Nice, Associate Professor of Études Françaises*
SULLIVAN, S.J., DipPhysEd *Otago*, MSc PhD *Wat., Assistant Professor of Exercise Science*
SVOBODA, J.V., DipIng *Prague*, DEng *C'dia., Associate Professor of Mechanical Engineering*
SWAMY, M.N.S., BSc *Mys.*, DIISc *I.I.Sc.*, MSc PhD *Sask.*, Ing, *Professor of Electrical Engineering*
SWEDBURG, R.B., BS *Bemidji*, MEd EdD *Idaho, Associate Professor of Exercise Science*
SWITZER, L., BS MA PhD *Penn., Associate Professor of Finance*
SYNNOTT, A.J., BSc PhD *Lond.*, MA *W. Ont., Associate Professor of Sociology*
SZABO, M.E., MA *Oxf.*, MSc PhD *McG., Professor of Mathematics*
SZILASI, G., *Assistant Professor of Fine Arts (Cinema and Photography)*

TADDEO, D.J., BA *Loy. (Montr.)*, PhD *Stan. U., Associate Professor of Communication Studies*
TAGGART, G.C., MA *Colo.*, PhD *Montr., Professor of Études Françaises*
TAKAHASHI, A., BA *Meiji, Tokyo*, MA *Hawaii*, PhD *Pitt., Associate Professor of Economics*
TASCONE, J.F., BA MA *St. Bonaventure, Associate Professor of Sociology*
TAYLOR, D., BA MA PhD *Tor., Assistant Professor of English*
TAYLOR, M., BA *Sask.*, MA *Wis.*, PhD *Tor., Associate Professor of Applied Social Science*
TAYLOR, N.D., BA *McM.*, MA PhD *McG., Associate Professor of Psychology*
TAYLOR, W.D., BA *Wat. Luth.*, MBA *McM.*, PhD *Montr. (HEC), Associate Professor of Management*
TEE, O.S., BSc *Leic.*, MSc *McM.*, PhD *E. Anglia, Professor of Chemistry*

TESKEY, L., BA MA *McM.*, PhD *Oxf.*, *Lecturer in Religion*
THORNTON, P.A., MA PhD *Aberd.*, *Associate Professor of Geography*
THULASIRAMAN, K., BE MSc *Madr.*, PhD *I.I.T. Madras*, *Professor of Electrical Engineering*
THWAITES, H., BA *Loy. (Montr.)*, *Lecturer in Communication Studies*
TIFFOU, M., BA *Toulouse*, DES *Montr.*, *Associate Professor of Études Françaises*
TITTLER, R., BA *Oberlin Coll.*, MA PhD *N.Y.*, *Professor of History*
TOMBERLIN, T.J., BS *Flor.*, MPH *Mich.*, PhD *Harv.*, *Associate Professor of Quantitative Methods*
TOWNSHEND, R.E., MSc *W. Ont.*, PhD *Ott.*, *Associate Professor of Chemistry*
TRESIERRA, J., BA *Catholic U., Lima, Peru*, MA PhD *Notre Dame*, *Associate Professor of Sociology*
TROITSKY, M.S., DipCE DTechSc *Belgrade*, Ing, *Professor of Civil Engineering*
TRUCHON, P.N., BA *Laval*, MA *McG.*, *Associate Professor of Études Françaises*
TRUDEL, G.J., BSc *McG.*, PhD *Leeds*, *Associate Professor of Chemistry*
TRUEMAN, C.W., BEng MEng PhD *McG.*, *Associate Professor of Electrical Engineering*
TURGEON, J.C., MS PhD *Col.*, *Associate Professor of Mathematics*
TWEEDIE, K., BA *McG.*, *Assistant Professor in Fine Arts (Cinema and Photography)*

UDY, J.M., BA *Durh.*, PhD *C'dia.*, *Sessional Lecturer in Urban Studies*
UPSHUR, J.A., BA *Yale*, MA PhD *Mich.*, *Professor of Applied Linguistics*
URSIC, M., BA *Pacific Luth.*, MBA *Wash.*, PhD *Ore.*, *Assistant Professor of Marketing*

VALASKAKIS, G., BSc *Wis.*, MA *Cornell*, PhD *McG.*, *Associate Professor of Communication Studies*
VAN NUS, W., BA MA PhD *Tor.*, *Associate Professor of History*
VAN TOCH, L., BA *Durh.*, LèsL *Lille*, MA *Durh.*, *Associate Professor of Études Françaises*
VASIL, A., BComm LA *McG.*, CA, *Lecturer in Accountancy*
VATISTAS, G.H., BEng MEng PhD *C'dia.*, *Assistant Professor of Mechanical Engineering*
VAZQUEZ-ABAD, J., BSc *UNAM*, MA *C'dia.*, *Lecturer in Education*
VELLACOTT, J., BA MA *Oxf.*, MA *Tor.*, PhD *McM.*, *Visiting Assistant Professor, Simone de Beauvoir Institute*
VERSCHINGEL, R.H.C., BSc *Sir G. Wms.*, PhD *McG.*, *Professor of Chemistry*
VERTHUY, M.E., BA *Lond.*, MA *Tor.*, *Associate Professor of Études Françaises*
VILLATA, B., BA *C'dia.*, Dottore *U. Torino*, *Sessional Lecturer in Modern Languages and Linguistics*
VIPOND, M., BA *Qu.*, MA PhD *Tor.*, *Associate Professor of History*

WADE, P.F., BA *Tor.*, MSc *Montr.*, PhD *McG.*, *Associate Professor of Accountancy*
WAGNER, N., BFA *Mt. All.*, MA *C'dia.*, *Associate Professor of Fine Arts (Art Education)*
WAINWRIGHT, R.B., RCA, DipFA *Van. Sch. of Art*, *Associate Professor of Fine Arts (Sculpture, Ceramics and Fibres))*
WANG, J.C., BSME *Nat'l. Taiwan U.*, MEng PhD *W.Ont.*, *Associate Professor, Centre for Building Studies*
WANG, Y.H., BS *National Taiwan*, MBA *N.Y.*, MS *Stan.*, PhD *Ohio State*, *Associate Professor of Mathematics*
WAREHAM, R.S., BA *R.M.C.*, MA *Mich.*, *Associate Professor of English*
WATERS, K.E., BA *McG.*, MA *Oxf.*, *Associate Professor of English*
WAUGH, T., BA *W. Ont.*, MFA MPhil PhD *Col.*, *Associate Professor of Fine Arts (Cinema and Photography)*
WESTBURY, R.A., BSc PhD *McG.*, *Associate Professor of Chemistry*
WHEELER, D., BSc *Lond.*, *Professor of Mathematics*
WHITE, C.W., BA *Rice*, PhD *Stan.*, *Associate Professor of Psychology*
WHITE, D., BS *Ohio*, MS PhD *Pitt.*, *Associate Professor of Psychology*
WHITTOME, I., RCA Dip *Van. Sch. of Art*, *Associate Professor of Fine Arts (Painting and Drawing)*
WIDDEN, P., BSc *Liv.*, PhD *Calg.*, *Associate Professor of Biology*
WILD, C., BFA *C'dia.*, MFA *Wis.*, *Assistant Professor of Fine Arts (Printmaking)*
WILLIAMS, B., BA *Tor.*, MA *Alta.*, PhD *Car.*, *Associate Professor of Political Science*
WILLS, R.O., BSc *Dal.*, MBA *Windsor*, *Associate Professor of Quantitative Methods*
WISE, R.A., BA MA *Calif. State*, PhD *McG.*, *Professor of Psychology*
WONG, T.Y., MA MSc *Tor.*, *Lecturer in Mathematics*
WOODSIDE, B., BSc *University Coll.*, PhD *McM.*, *Associate Professor of Psychology*
WOODSWORTH, J., BA *McG.*, LèsL *Stras.*, PhD *McG.*, *Associate Professor of Etudes Françaises*

XISTRIS, G.D., BEng MEng *McG.*, DScA *Montr.*, Ing, *Associate Professor of Mechanical Engineering*

YOUNG, J.W., BSc *Lond.*, MA *Br. Col.*, PhD *McG.*, *Associate Professor of Geography*

ZAKI, M., BSc *Luck.*, MSc *Alig.*, PhD *Montr.*, *Associate Professor of Mathematics*
ZEMAN, V., PhD *Charles U.*, *Associate Professor of Philosophy*
ZIELINSKI, Z.A., Inz MTechSc DTechSc *Politechnika Warszawska*, Ing, *Professor of Engineering*
ZIENIUS, R.H., BSc PhD *McG.*, *Associate Professor of Chemistry*
ZIOGAS, P.D., BASc MASc PhD *Tor.*, *Associate Professor of Electrical Engineering*
ZUCKER, C., BA *Clark U.*, MA PhD *N.Y.*, *Visiting Associate Professor of Fine Arts (Cinema and Photography)*

RESEARCH PROFESSORS

BOZARTH, M., PhD *C'dia., University Research Fellow in Psychology*
COOLIDGE, R.T., BA *Harv.*, MA *Calif.*, BLitt *Oxf., Research Associate Professor of History*
DENES, G., BSc MSc PhD *Rennes, University Research Fellow in Chemistry*
FABRICANT, V.I., BTech MSc *Ivanovo (USSR)*, PhD *Moscow, Research Associate Professor of Mechanical Engineering*
FARIDANI, H., PhD *Calif. (Irvine), Research Associate Professor of Electrical Engineering*
LAURENCE, J.-R., PhD *C'dia., University Research Fellow in Psychology*
LE VAN MAO, R., PhD *Lyon, Research Associate Professor of Chemistry*
MAK, M., *Research Associate Professor of Chemistry*
MEANEY, M., PhD *C'dia., University Research Fellow in Psychology*
MEHMET ALI, M., PhD *Car., Research Associate Professor of Electrical Engineering*
MURTY, K., PhD *Harv., University Research Fellow in Mathematics*
PASK, G., MA *Camb.*, PhD *Lond.*, DSc *Open., Research Professor of Education*
RAHKEJA, S., PhD *C'dia., Research Assistant Professor of Mechanical Engineering*
ROMPRE, P.-P., PhD *Ott., University Research Fellow in Psychology*
SHARMA, D., *Research Associate Professor of Chemistry*
TOVAR, M., MS PhD *Indiana, Research Associate Professor of Education*

LIBRARIANS

APPLEBY, J., BA *Sir G. Wms.*, MLS *McG., Assistant Librarian (Vanier)*
BELANGER, A.M., BA MLS *McG., Cataloguing Librarian*
BENNETT, J., BA MA *Sir G. Wms.*, MLS *McG., Interlibrary Loans Librarian (Norris)*
BIEN, L., DipArt *Cooper Union for Advancement of A. & S.*, BS *Col.*, MS *Long I. U., Assistant Slide Librarian, Fine Arts (Art History Slide Library)*
BOUCHER, L., BA *Sir G. Wms.*, BLS *McG., Reference Librarian (Vanier)*
BRUCE, E., BA *Windsor*, BLS *Tor., Reference Librarian (Norris)*
CAMERON, D., BA BLS *McG., Reference Librarian (Norris)*
CARPENTIER, L., BA *Laval*, BLS *Tor.*, MBibl *Montr., Government Publications Librarian*
COHEN, M., BA MLS *McG.*, PhD *Exe., Collection Coordinator*
GAMEIRO, M.H., BA MLS *McG., Reference Librarian (Vanier)*
GOLUBOWSKI, A., BA *McG.*, MPs *Montr.*, MLS *McG., General Librarian - Reference and Government Publications (Norris)*
HARRIS, L., BSc MLS *McG., Reference Librarian (SEL)*
HAWKE, S., BA *Loy. (Montr.)*, MLS *McG., Assistant Guidance Services Librarian, Guidance Library*
HOBBS, K., BSc MLS *McG., Reference Librarian (SEL)*
HOCHMANN, G., BA *Sir G. Wms.*, MLS *McG., Reference Librarian (Norris)*
HUBBARD, M., BA *U. of Missouri*, MLS *Emporia Kansas State Coll., Librarian-in-Charge, Guidance Library*
JIRKOVSKY, Z., Dip Ing Tech *U. Prague*, MLS *McG., Head, Science and Engineering Library*
KALB, S., BA *Sir G. Wms.*, MLS *McG., Derived Cataloguing and Additions Librarian*
KATZ, S.B., BA *McM.*, BLS *Tor.*, MLS *McG., Cataloguing Librarian*
MacLAURIN, C., BA MLS *McG., Reference Librarian (Norris)*
MAHARAJ, D., BA MLS *McG., Reference Librarian (Norris)*
MASSICOTTE, M., BA *N.Y. State (Platts.)*, MLS *McG., Bibliographic Maintenance and Authority Librarian*
MORELAND, B., BA *McG.*, MLS *W. Ont., Reference Librarian (Norris)*
OLYNYK, E., BA *Sir G. Wms.*, MLS *McG., Cataloguing Librarian*
ORBACH, M., BA BLS MLS *McG., Reference Librarian (Vanier)*
OTCHERE, F., BA *Br. Col.*, MLS *McG., Cataloguing Librarian (Non-Print/Materials)*
PERRON, H., BA BPh BLS *Ott.*, MLS *McG., Reference Librarian (Vanier)*
PERRY, K., BA *Tor.*, MLS *SLIS (W. Ont.), Slide Librarian, Fine Arts (Art History Slide Library)*
PRINCZ, J., BA *Sir G. Wms.*, BLS *McG.*, MA *Montr., Associate Director of Libraries, Reader Services*
RANKIN, S., BSc *Dal.*, MLS *McG., Computer Assisted Services Librarian*
ROHRLICK, R., BSc MLS *McG., Head, Norris Library*
RUBINLICHT, L., BA *Sir G. Wms.*, MLS *McG., Head, Cataloguing Department*
SENDEK, I., BA *Marianopolis*, BLS MLS *McG., Head, Loyola Campus Libraries*
SINGER, L., BA MLS *McG.*, MA *Mich., Non-Print Librarian (Norris)*
SNOWBALL, G.J., BSc *Lond.*, MLS *McG., Assistant Director of Libraries, Technical Services*
TABAH, A., BSc MLS *McG., Reference Librarian (SEL)*
TALLON, J., BA *Manit.*, MA MLS *W. Ont., Computer Assisted Reader Services Coordinator*
WINIARZ, E., BSc MLS *McG., Reference Librarian (SEL)*
WRIGHTSON, R., BA *Qu.*, MLS *W. Ont., Head, Acquisitions Department*
ZEMAN, E., BA *Prague*, MLS *W. Ont., Cataloguing Librarian*

NOTE: The following is a list of part-time Faculty for 1985-86.

FACULTY PART-TIME

ABBONDANZA, M., *Psychology*
ABIRI, M.A., *Electrical Engineering*
ABRAN, H., *Études Françaises*
ACUNER, S., *Finance*
ADKINS, M.D., *Applied Social Science*

AHMED, I., *Accountancy*
AHMEDALI, T., *Geology*
AIKEN, R.B., *Sociology and Anthropology*
ALBRIGHT, J.E., *Marketing*
ALEMANY-GALWAY, M., *Cinema and Photography*
ALLEN, L., *Mechanical Engineering*
ALLNUT, D., *Communication Studies*
AMAT, B., *Modern Languages and Linguistics*
AMUNDSEN, C., *Education*
ANDREWS, J., *Library Studies*
APRIL, R., *Cinema and Photography*
ARAGON, C., *Psychology*
ARCAND, M., *Printmaking*
ARMSTRONG, H., *Political Science*
ARNOPOULOS, S., *Journalism*
ARTZY, D., *Sociology and Anthropology*
ASKEW, P., *English*
ATTIA, M.H., *Mechanical Engineering*
AUCLAIR, M., *Modern Languages (Spanish)*
AUST, E.A., *Management*

BABANIKOS, J., *Communication Studies*
BABINSKI, M.C., *Modern Languages (Spanish)*
BACZ, B., *Modern Languages and Linguistics*
BAILLIE PALMER, D., *English*
BANTEY, M., *Journalism*
BARFURTH, M., *Mathematics*
BARKER, L., *Exercise Science*
BARNARD, W., *Management*
BARRON, D., *Chemistry*
BARTH, L.A., *Engineering*
BARTLETT, B., *English*
BEAUDRY, A.E., *Design*
BEAUDRY, M., *Applied Social Science*
BELAND, L., *Painting and Drawing*
BELLI-BIVAR, G., *Études Françaises*
BELOFF, R., *English*
BELTEMPO, J., *Psychology*
BENARD, J.P., *Études Françaises*
BENDAHAN, R., *Cinema and Photography*
BEN-DOR, S., *Religion; Sociology and Anthropology*
BENOIT, M., *English*
BERCZYNSKI, W.S., *Mechanical Engineering*
BERGER, C., *Psychology*
BERGEY, A., *Études Françaises*
BERNATH, P., *Modern Languages and Linguistics*
BERTRAND, L., *Theatre*
BHAT, V.M., *Computer Science*
BHATTACHARYYA, A.K., *Electrical Engineering*
BILODEAU, A., *Études Françaises*
BINDA, M., *Études Françaises*
BIRON, N., *Études Françaises*
BIRRELL, R., *Communication Studies*
BISSONETTE, L., *Computer Science*
BLAIS, F., *Cinema and Photography*
BLICKER, S., *English*
BLOCK, S.C., *Management*
BOIVIN, J.-R., *Études Françaises*
BOLLA-PAQUET, C., *Études Françaises*
BOON, G., *Quantitative Methods*
BORDAN, J., *Engineering*
BOUCHARD, M., *Études Françaises*
BOUDREAU, N., *Modern Languages and Linguistics*
BOURGET, V.G.M., *Psychology*
BOZART, M., *Psychology*
BRANCHAUD, L.G., *Accountancy*
BRANDL, E., *Painting and Drawing*
BRAUN, C., *Psychology*
BREJDYGANT, S., *Theatre*
BREUER, R.E., *Études Françaises*
BROEGE, V., *Classics*
BROWN, B., *Mathematics*
BROWN, D.K., *Finance*
BROWN, M., *Journalism*
BRUCE, M., *Journalism*
BUB, D., *Psychology*
BURSTEIN, S., *Psychology*

CAMERON, N., *Liberal Arts College*
CAMPBELL, B., *Economics*
CANTIN, R., *Cinema and Photography*
CARBALLADA, B.L., *Civil Engineering*
CARDUCCI-SIDORENKO, E., *Modern Languages (Italian)*
CARPI-LOBATON, C., *Modern Languages and Linguistics*
CAVERLY, G., *Sociology and Anthropology*
CHABOT, C., *Cinema and Photography*
CHALK, K., *Science and Human Affairs*
CHAPDELAINE, A., *Études Françaises*
CHARBONNEAU, R., *History*
CHARLEBOIS, J., *Library Studies*
CHARPENTIER, R.-M. J., *Education*
CHEN, M.R.Y., *Mathematics and Quantitative Methods*
CHICHEKIAN, G., *Geography*
CHOMSKI, C., *Mechanical Engineering*
CHOQUETTE, M., *English*
CHU, P.T., *Mathematics*
CLARKE, G., *Education*
CLEMENT, S.B., *Management*
CLERICI, G., *Engineering*
COLLE, J.M., *English*
CONNELL, D.J., *Accountancy*
CONNELLY, J., *Teaching of English as a Second Language*
COOKE, M.E., *Journalism*
COOMES, O., *Geography*
CORRY, C., *Art Education*
CORVINGTON, J.-M., *Finance*
COUGHLIN, L.P., *Exercise Science*
COX, L., *Applied Social Science*
CROUCH, A., *Chemistry*
CRUICKSHANK, L., *Communication Studies*
CURTIS, S., *Études Françaises*
CUTLER, J., *Management*
CYR, J., *Études Françaises*

DABEE, B., *Economics*
D'ALESSIO, M., *Modern Languages (Italian)*
DANCETTE, J., *Études Françaises*
D'ANTONI, P., *Quantitative Methods*
DARMON, N., *Études Françaises*
DAS, S.K., *Electrical Engineering*
DAVIS, A.B., *Physics*
DEBIPARSHAD, S.N., *Economics*
DELANEY, P., *Theatre*
DEMERS, P., *Études Françaises*
DE MULLER, R.-M.A., *Modern Languages & Linguistics*
DENOBILE, G., *Communication Studies*
DERY, F., *Painting and Drawing*
DESLAURIERS, R., *Études Françaises*

DESROSIERS DE LANAUZE, R., *Management*
DE VRIES, E., *Design*
DICKINSON, P., *Economics*
DIEGUEZ, I., *Modern Languages (Spanish)*
DIEHL, B., *Library Studies*
DI LEO, G., *Painting and Drawing*
DI LILLO, A., *Études Françaises*
DI LULLO, G., *Modern Languages (Italian)*
DISTEFANO, G., *Marketing*
DOERR, K., *Modern Languages (German)*
DONAHUE, J.S., *Modern Languages and Linguistics*
DONOVAN, M., *Communication Studies*
DOUBT, B.E., *Theatre*
DOYLE, M., *English*
DRUMMOND, S., s.j., *Biology*
DUBINSKY, L., *Painting and Drawing*
DUBNEY, L., *Applied Social Science*
DUBREUIL, E., *Management*
DUCK, F., *Finance*
DUDLEY, L., *Engineering*
DUKKIPATI, R.V., *Mechanical Engineering*
DUMONT, H., *Études Françaises*
DYKYJ, O.M., *Cinema and Photography*

EADIE, M., *Art Education*
EBRAHIM, A.H., *Accountancy*
EGGENBERGER, J.C., *Management*
EL KHALIL, E., *Quantitative Methods*
ELLIOTT, D., *Painting and Drawing*
ELMAN, M., *Psychology*
ELMAN, S., *Exercise Science*
EMO, B.G., *Painting and Drawing*
ERNST, F.H., *Centre for Building Studies*
ESSEGULIAN, H., *Modern Languages and Linguistics*
EVANS, D., *Painting and Drawing; Sculpture, Ceramics and Fibres*
EVOY, K.L., *English*
EWERT, A., *Accountancy*

FAGEN, G., *Accountancy*
FAHIM, A., *Mechanical Engineering*
FAINARU, J., *Painting and Drawing*
FAIRCHILD, A., *Art Education*
FAJZEL, G.A., *Marketing*
FAMILY, G., *Psychology*
FARLEY, D., *Cinema and Photography*
FARMER, T., *Applied Social Science*
FARUQUE, S.M., *Electrical Engineering*
FAYERMAN, F.M., *Painting and Drawing*
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FISCHLIN, D., *English*
FISHBANE, S., *Religion*
FITZPATRICK-MARTIN, I., *Engineering*
FLAHERTY, N., *Management*
FLINT, A., *Printmaking*
FOLDES, S., *Quantitative Methods*
FORBES, V.M., *Mathematics*
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FORTIER, J.C., *Leisure Studies*
FOSTER, S., *Political Science*
FOURNIER, P., *Études Françaises*
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FRANK, H., *Psychology*
FRANKLIN, D., *Management*
FREED, J.L., *Finance*
FREEMAN, C., *Painting and Drawing*
FREGEAU, P., *Political Science*
FROHLICH, M., *Teaching of English as a Second Language*
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GAERTNER, E., *Biology*
GALDES, S., *Études Françaises*
GAMBERG, B., *Exercise Science*
GARAVITO, J., *Modern Languages (Spanish)*
GARCIA-MORENO, T., *Modern Languages (Spanish)*
GARFIN, J., *Printmaking*
GARMAISE, M., *Classics*
GAYDA, E., *Education*
GERMINARO, R.J., *Biology*
GHAHREMANPOUR, B., *Quantitative Methods*
GHAN, L., *English*
GHORAYEB, S., *Études Françaises*
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HAIMAN, H.J., *Accountancy*
HANDELMAN, O., *Accountancy*
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HUOT, J.C., *Centre for Building Studies*

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NEUMAN, C., *Marketing*
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NOCHERA OUIMETTE, M.-E., *Modern Languages & Linguistics*
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NOWAK, T., *Accountancy*
NOZETZ, H., *Accountancy*
NYQUIST, C., *Theatre*
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O'CONNOR, T.G., *English*
OLESIK, D.B., *Economics*
OLFMAN, S., *Psychology*
OLIVER, C., *Management*
OLYNYCK, M., *Teaching of English as a Second Language*
OPALA, J.W., *Computer Science*
OPPENHEIM, M.S., *Simone de Beauvoir Institute*
OTCHERE, D., *Management*
OXLEY, D., *Painting and Drawing*

PAINCHAUD-MINGARELLI, S., *Études Françaises*
PANET-RAYMOND, S., *Dance*
PANUNTO, B., *Education*
PAPAGEORGIOU, A., *Psychology*
PARRIS, J., *Chemistry*
PELLAND, L., *Design*
PELUSO, M., *Political Science*
PENNEY, L., *Études Françaises*
PERDUE, J., *Education*
PETCOFF, C., *Études Francaises*
PETERS, D., *Computer Science*
PETERS, K., *Painting and Drawing*
PETRUSHKA-BORDAN, T., *Management*
PETULANTE, N., *Mathematics*
PHILIP, R.D., *Leisure Studies*
PHILIPSON, D., *Science and Human Affairs*
PIETRUSZCZAK, S., *Civil Engineering*
PLAIN, O., *Études Françaises*
PLOUFFE, B., *Modern Languages (German)*
POLLAK, L., *Études Françaises*
POLLAK, R., *Cinema and Photography*
POMERANTZ, D., *Psychology*
POORNAIAH, D.V., *Computer Science*
POTVIN, C., *Modern Languages and Linguistics*
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QUIRION, R., *Psychology*
QURESHI, B., *Computer Science*

RABINOVITCH, B., *Art History*
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RAICEK, S.M., *Management*
RAMANATHAN, G., *Computer Science*
RAMASWAMY, K., *Electrical Engineering*
RAMSDEN, A., *Fine Arts*
RANCOURT, M., *Études Françaises*
RAND, J., *Teaching of English as a Second Language*
RANDRIAMANANTENA, G., *Études Françaises*
RAO, A.S., *Mathematics*
RAUDSEPP, K., *Music*
RAVEL, A.E., *English*
RAY, K.A., *History*
RAYMOND, J.-F., *Marketing*
REEVES, S., *Painting and Drawing*
REHEL, R., *Exercise Science*
REID, J., *Art Education*
REINBLATT, H., *Finance; Management*
REINBLATT, N., *Accountancy*
RESTHER, C., *Engineering*
REUBEN, K.A., *Electrical Engineering*
REYTO, M., *English* .
RICHARD, J.-Y., *Études Françaises*
RICHARDSON, W., *Economics*
ROBERTSON, K., *Education*
ROCHFORD, J., *Psychology*
ROHAN, I., *Exercise Science*
ROHRLICK, M., *Painting and Drawing*
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ROMEO, A., *Accountancy*
ROSENBERG, M.M., *Sociology and Anthropology*
ROSENBERGER, W., *Accountancy*
ROSS, Y., *Music*
ROSSIN-ARTHIAT, M.F., *Quantitative Methods*
ROTH, L., *Communication Studies*
ROTH, P., *Communication Studies*
ROTSTEIN, M.D., *Modern Languages and Linguistics*
ROY, A., *Études Françaises*
RUSSELL, A.D., *Centre for Building Studies*
RUSSELL, S.C., *English*
RUTTENBERG, B., *Sociology and Anthropology*
RUWEDEL, M., *Cinema and Photography*
RYAN, C., *Cinema and Photography*
RYCHEL, C., *Management*

SAHARUNI, R., *Cinema and Photography*
SAHGAL, A., *Marketing*
SAID, A., *Economics*
SAKS, R.D., *Marketing*
SAMSON, L., *Music*
SAMUELS, A.S., *Communication Studies*
SAMUELS, C., *Cinema and Photography*
SAMY, M.H., *Art Education*
SANCHEZ, M.F., *Modern Languages (Spanish)*
SANDMARK, P.A., *Cinema and Photography*
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SERRUYA, C., *Études Françaises*
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SHAFAAT, A., *Quantitative Methods*
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SHIZGAL, E., *Education*
SIEGEL, L., *Cinema and Photography*
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SILVERMAN, F., *Sociology and Anthropology*
SIM, R., *Accountancy*
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SIMON, K., *Marketing*
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SOJO-LOPEZ, L.E., *Chemistry*
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SYLVESTRE, G., *Études Françaises*

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THOMAS, U.P., *Marketing*
THOMAS, Y., *Études Françaises*
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TRAN, T.N., *Études Françaises*
TREMBLAY, R.C., *Political Science*
TREPANIER, C., *Études Françaises*
TROTT, C.G., *Sociology and Anthropology*
TURNBULL, R., *Psychology*
TURNER, D., *Music*
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TUROWETZ, A., *Sociology and Anthropology*

ULLMANN, F., *Études Françaises*
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VANDYKE, J., *Études Françaises*
VAN WEST, P.E., *Education*
VARAGNOLO, L., *Études Françaises*
VENKATESH, K., *Computer Science*
VERAGUIN, P., *Music*
VERMA, N.S., *Civil Engineering*
VERONNEAU, P., *Cinema and Photography*
VERRON, A., *Études Françaises*
VINCENT, M., *Sculpture, Ceramics and Fibres*
VINEBERG, G., *Accountancy*
VIT, G.B., *Management*

WADHWANEY, A., *Economics; Quantitative Methods*
WAHNON, E., *Quantitative Methods*
WALKER, D., *Education*
WALLACE, P.R., *Science College*
WALSH, J., *Theological Studies*
WALSH, M., *Education*
WARGNY, N., *Psychology*
WEBB, E., *Computer Science*
WEINBERG, S., *Education*
WEISER, B., *Marketing*
WHEELER, O., *Art History*
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WHITE, J.L., *Teaching of English as a Second Language*
WHITE, W., *Accountancy*
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WILLIAMS, R., *Sculpture, Ceramics and Fibres*
WILLING, R.D., *Marketing*
WILSON, J., *English*
WILSON, T., *Education*
WINER, L., *Education*
WINIARZ, J., *Music; Liberal Arts College*
WISE, A., *Education; Management*
WISE, R., *Accountancy*
WONG, E.G.W., *Accountancy*
WONG, S., *Finance*
WOO, P., *Computer Science*
WORENKLEIN, A., *Education*
WORKMAN, H.E., *Education*

YOUNG, S.M., *Applied Social Science*

ZARALIS, G., *Economics*
ZATTORE, R., *Psychology*
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200 Equivalents Index

Note: Recent curricular changes will affect some of the entries in the following lists. A student who suspects that a course he proposes to take may be equivalent to another for which he already has credits should consult his programme adviser.

SPECIAL NOTE REGARDING COURSE NUMBERING:
Effective 1986-87, the use of the "C" designation before course numbers is discontinued. Although publication deadlines prohibited their removal from this issue of the Calendar, all other references will reflect this change. Therefore, student records and transcripts and the class schedule booklet will list 1986-87 courses without the "C" prefix.

200.1 Faculty of Arts & Science

Curricular change in the Faculty will affect some of the entries in the following list. A student who suspects that a course he proposes to take may be equivalent to another for which he already has credits should consult his programme adviser.

NOTE: For old course numbers used prior to 1980-81, see Undergraduate Calendar 1984-85, or consult programme adviser.

Course	Old Numbers and Equivalents

Anthropology

C202 ..... C211
C303, C304 } C362
C371, C371 } C369
C401, C402 } C469

Applied Social Science

C240 { C355, C356 } C351
C250 { C250, C355 } C212
C420 ..... C421
C440 ..... C441
C450 { C451, C452 }
C490 ..... C400

Biology

C210 ..... C205
C234, C235 } C238
C334 ..... C237
C344 ..... C246
C352 ..... C461
C445 ..... C339
C480 ..... C450
C481 ..... C451

Canadian Studies

C220 ..... INTE C220
C320 ..... INTE C320
C321 ..... INTE C321
C421 ..... INTE C421
C422 ..... INTE C422

Chemistry

C233 { C334, C232 } C234
C271, C374, C375 } C372, C373 } C371
C312 { C310, C315 } C314, C319
C324, C325 { C321, C322, C329 }
C327 ..... C328
C332 ..... C232 (1983-84, 1984-85)
C336 ..... C335 ..... C435
C341 { C342, C348 }
C392 { C390, C397, C399 }
C491 { C490, C497, C499 }
C492 { C491, C498 }

Classics

C230 ..... HIST C219
C231 ..... HIST C221
C240 ..... HIST C223
C241 ..... HIST C224
C242 ..... HIST C225
C243 .... C343 { HIST C226, HIST C320 }
C257, C258 } C256
C264 ..... HIST C227
C265 ..... HIST C229
C266 .... C264 .... HIST C227
C267 .... C265 .... HIST C229
C324 .... C224
C325 .... C225
C326, C327 } C320 .... CLAS C220
C350 .... C250
C351 .... C251
C352 .... C252
C353 .... C253
C446 .... C346 .... HIST C321
C448 ..... HIST C420
C449 ..... HIST C422

Communication Studies

C320 ..... C205
C321 ..... C205
C322, C323 } C304
JOUR, C343 } COMS, C343 } C340, C342
C351 ..... C350
C352 ..... C467
C366, C367 } C363

Course	Old Numbers and Equivalents
JOUR } C446 }	COMS C446
C454 } C455 }	C442
C460 } C461 }	C465
C468 } C469 }	C466
C470 } C471 }	C468
C496 } C497 }	C495

Economics

C221 ..... QUAN C243
C222 ..... QUAN C244
C408 ..... C415

Education

Adult Education (previously Andragogy)

C201 } C202 } C200

C333 { C330 C331

C344 } C345 } C343 { C340 or C341 and C342

Education

C371 ..... C370
C387 ..... C381
C428 } C429 } C430
C473 } C474 } C470
C490 } C491 } C497 C498

English

C307 ..... C297
C308 ..... C298
C370 { C376 C377
C478 ..... C497
C479 ..... C498
C480 ..... C499

English as a Second Language

C209 } C210 } C201

Études Françaises

C208* C300*
C308* C301*
C384* { C368 C369
C409 } C410 } C408*
C496* C498*
C497* C499*
*6 crédits

Exercise Science

C201 ..... BIOP C201
C215 { C315, C316 C413, C415 { BIOP C413 BIOP C415

Course	Old Numbers and Equivalents
C251	BIOP C251
C253 ..... C351	BIOP C351
C255 ..... C355	BIOP C355
C261	BIOP C261
C262 ..... C337	BIOP C337
C309 ..... C310	BIOP C310
C311 ..... C211	BIOP C211
C313	BIOP C313
C331	BIOP C331
C333	BIOP C333
C335	BIOP C335
C336 ..... C433	BIOP C433
C353	BIOP C353
C357	BIOP C357
C370 ..... C470 (81/82)	BIOP C370
C403 ..... C402	BIOP C402
C404 ..... C401	BIOP C401
C411	BIOP C411
C436	BIOP C436
C453	BIOP C453
C455	BIOP C455
C460 ..... C462	BIOP C462
C463 ..... C466	BIOP C466
C468	BIOP C468
C470 ..... C370 (81/82)	BIOP C470

Geography

C267 { C265 C266 C262
C271 { C275 C276
C275 ..... C271
C276 ..... C271
C312 ..... C412
C315 ..... C316
C347 ..... C341
C352 ..... C356
C353 ..... C356
C358 ..... C355
C359 ..... C355
C433 ..... C401

Geology

C224 ..... C215
C231 ..... C221
C232 ..... C223
C331 ..... C310
C332 ..... C317 ..... C412
C415 ..... C315
C417 ..... C416 ..... C412

Hebrew

C300 ..... C235

History

C219 ..... CLAS C230
C221 ..... CLAS C231
C223 ..... CLAS C240
C224 ..... CLAS C241
C225 ..... CLAS C242
C226 { C320 C321 } CLAS C243
C227 ..... CLAS C266, C264
C229 ..... CLAS C267, C265

Course	Old Numbers and Equivalents
C276, C277	C275
C278, C279	C271
C300, C301	C311
C320, C321	C354
C329, C331	C318
C364, C365	C361
C366, C367	C363
C375, C376	C329
C377, C378	C347
C379	C380 (URBS C379, URBS C382) URBS C380
C381, C382	C330
C383, C384	C335
C385, C386	C336
C388, C389	C346
C397, C398	C344
C426	C425, C427, C428
C430	C431, C432, C433
C436	C434, C435
C494	INTE C454
C495	INTE C455

Interdisciplinary Studies

C230	C300, C391
C231	C302, C393
C232	C300, C391
C233	C302, C393
C280	URBS C280
C481	URBS C481
C482	(URBS C483, URBS C484) URBS C482

Journalism

C210	C305
C302	C300; C301
C303	C301
C310	C405
C343	COMS C340, COMS C342, COMS C343
C400	C401
C402	C402
C446	COMS C446

Leisure Studies

C241	EXCI C241 ... BIOP C241
C250	LEIS C342
C342	EXCI C342 ... BIOP C342
C426	EXCI C426 ... BIOP C426
C430	INTE C430
C431	LEIS C430
C464	EXCI C464 ... BIOP C464

Library Studies

C433	C333

Linguistics

C310	C210
C311	C211
C372	C370, C371
C373	C417

Mathematics

C208	C202
C209	C203
C327, C427	C325
C336, C436	C331
C337, C437	C431
C348, C448	C344
C454	C345
C464, C467	C461
C496	C499

Philosophy

C362	C462
C460	C360
C469	C369
C486	C386
C488	C388

Political Science

C412	C411, C413

Psychology

C280	C391
C281	C392
C379	C391

Religion

C316, C317	C312
C342	C443
C350	C325
C352	C329
C376, C377	C364
C378, C379	C465
C394	C395
C395	C396
C396	C397
C397	C398
C410	C499

Course	Old Numbers and Equivalents

Science and Human Affairs

C250 ..... INTE C250
C251 ..... INTE C251
C252 ..... INTE C252
C253 ..... URBS C253 ..... INTE C253
C254 ..... URBS C254 ..... INTE C254
C255 ..... INTE C255
C256 ..... INTE C256
C350 ..... INTE C350
C351 ..... INTE C351
C450 ..... INTE C450
C451 ..... INTE C451
C452 ..... INTE C452
C453 ..... INTE C453
C454 ..... INTE C454
C455 ..... INTE C455

Simone de Beauvoir Institute

WMNS C290 ..... INTE C290
WMNS C291 ..... INTE C291
SDEB 398** { SDEB C301, C302, C303
WMNS 398*** { WMNS C390, C392, C393
WMNS 498* { WMNS C491, C492

* This course may be repeated once for credit in this programme provided the subject matter is different.

** This course may be repeated twice for credit in this programme provided the subject matter is different.

*** This course may be repeated three times for credit in this programme provided the subject matter is different.

Sociology

C203 ..... C200
C262, C263 } C260
C313, C314 } C312
C327, C328 } C326
C329, C429 } C340
C333 ..... C435
C336, C337 } C335
C338, C339 } C337
C361, C362 } C360
C374 ..... C426
C402, C403 } C400
C406, C407 } C405

Spanish

C220, C221 } C220
C255 ..... C235
C481 ..... C485

Teaching of English as a Second Language

C203 ..... ESL C203
C324 { C322, C323
C385 { C382, C383, C384
C413 { C411, C412
C424 { C422, C423
C433 ..... C479
C485 { C482, C483, C484

Theological Studies

C490 ..... C498
C491 ..... C499

Urban Studies

C253 ..... SCHA C253
C254 ..... SCHA C254
C280 ..... INTE C280
C379, C382 } INTE C380 / URBS C380 } HIST C380
C481 ..... INTE C481
C483, C484 } URBS C482 ..... INTE C482

Women's Studies

(See Simone de Beauvoir Institute)

Course	Old Numbers and Equivalents
C276, C277	C275
C278, C279	C271
C300, C301	C311
C320, C321	C354
C329, C331	C318
C364, C365	C361
C366, C367	C363
C375, C376	C329
C377, C378	C347
C379	C380 (URBS C379, URBS C382) URBS C380
C381, C382	C330
C383, C384	C335
C385, C386	C336
C388, C389	C346
C397, C398	C344
C426	C425, C427, C428
C430	C431, C432, C433
C436	C434, C435
C494	INTE C454
C495	INTE C455

Interdisciplinary Studies

C230	C300, C391
C231	C302, C393
C232	C300, C391
C233	C302, C393
C280	URBS C280
C481	URBS C481
C482	(URBS C483, URBS C484) URBS C482

Journalism

C210	C305
C302	C300; C301
C303	C301
C310	C405
C343	COMS C340, COMS C342, COMS C343
C400	C401
C402	C402
C446	COMS C446

Leisure Studies

C241	EXCI C241 ... BIOP C241
C250	LEIS C342
C342	EXCI C342 ... BIOP C342
C426	EXCI C426 ... BIOP C426
C430	INTE C430
C431	LEIS C430
C464	EXCI C464 ... BIOP C464

Library Studies

C433	C333

Linguistics

C310	C210
C311	C211
C372	C370, C371
C373	C417

Mathematics

C208	C202
C209	C203
C327, C427	C325
C336, C436	C331
C337, C437	C431
C348, C448	C344
C454	C345
C464, C467	C461
C496	C499

Philosophy

C362	C462
C460	C360
C469	C369
C486	C386
C488	C388

Political Science

C412	C411, C413

Psychology

C280	C391
C281	C392
C379	C391

Religion

C316, C317	C312
C342	C443
C350	C325
C352	C329
C376, C377	C364
C378, C379	C465
C394	C395
C395	C396
C396	C397
C397	C398
C410	C499

Course	Old Numbers and Equivalents

Science and Human Affairs

C250 ..... INTE C250
C251 ..... INTE C251
C252 ..... INTE C252
C253 ..... URBS C253 ..... INTE C253
C254 ..... URBS C254 ..... INTE C254
C255 ..... INTE C255
C256 ..... INTE C256
C350 ..... INTE C350
C351 ..... INTE C351
C450 ..... INTE C450
C451 ..... INTE C451
C452 ..... INTE C452
C453 ..... INTE C453
C454 ..... INTE C454
C455 ..... INTE C455

Simone de Beauvoir Institute

WMNS C290 ..... INTE C290
WMNS C291 ..... INTE C291
SDEB 398** { SDEB C301, C302, C303
WMNS 398*** { WMNS C390, C392, C393
WMNS 498* { WMNS C491, C492

* This course may be repeated once for credit in this programme provided the subject matter is different.

** This course may be repeated twice for credit in this programme provided the subject matter is different.

*** This course may be repeated three times for credit in this programme provided the subject matter is different.

Sociology

C203 ..... C200
C262, C263 } C260
C313, C314 } C312
C327, C328 } C326
C329, C429 } C340
C333 ..... C435
C336, C337 } C335
C338, C339 } C337
C361, C362 } C360
C374 ..... C426
C402, C403 } C400
C406, C407 } C405

Spanish

C220, C221 } C220
C255 ..... C235
C481 ..... C485

Course	Old Numbers and Equivalents

Teaching of English as a Second Language

C203 ..... ESL C203
C324 { C322, C323
C385 { C382, C383, C384
C413 { C411, C412
C424 { C422, C423
C433 ..... C479
C485 { C482, C483, C484

Theological Studies

C490 ..... C498
C491 ..... C499

Urban Studies

C253 ..... SCHA C253
C254 ..... SCHA C254
C280 ..... INTE C280
C379, C382 } INTE C380 / URBS C380 } HIST C380
C481 ..... INTE C481
C483, C484 } URBS C482 ..... INTE C482

Women's Studies

(See Simone de Beauvoir Institute)

Course	Old Numbers and Equivalents
C454	N454 414, 461 521A
C462	Intl Bus C462
C463	N463 481
C464	N464
C465	Intl Bus C465
C485	N485
C490	N490
C491	N491

Quantitative Methods

C243	N243 {Psyc C315, 242, Econ C221, Math 241, Stat 242}	308Z
C244	N244 {242, Econ C222, Stat 242}	308Z
C313	N313 {411, QA 411}	518Z
C314	N314 {411, QA 411}	518Z
C353	N353 Math 415	
C354	N354 Math 415	
C415	N415 412	
C423	N423 421	
C424	N424 421	
C425	N425 422	
C426	N426 422	
C433	N433	
C445	N445 442	
C446	N446 442	

200.2 Faculty of Commerce and Administration

NOTE A **The use of this note after certain course descriptions indicates, that there exists an equivalent course and that students who have the equivalent course may not take the listed course for credits. To find out the equivalents to the listed course refer to the index below.**

NOTE C **The use of this note after certain course descriptions indicates that with the permission of the Department a student may take the listed course twice for credits provided that a different subject is dealt with the second time.**

Course	Old Numbers and Equivalents
Accountancy	
C213	N213 211 313A/B, 300
214	N214 211 315B, 300
C217	411A/B, 400 / 402
C218	N216 {Man 411 / Fin 416} 413B, 402
C220 (120)	320Z
C221 (121)	320Z
C303 C403	N421 503A 421
C323	N313 411 415B, 400
C335 C325	N314 412 419B, 408
C407	407 507B
C414	{N215 Man 411 / N315 Fin 416} 511B 425
C422 N422	
C429	N432 431 {517B, 508 / 519B, 508} 432
C432	N433 431 433
C441	N441 {Com / Law 441} 513A/B, 504
C442	515B, 504
C451	N451 {(Computer Auditing New Name)}
C461	N461 509A, 507B
C468	Intl Bus C468
C470	470 560Z
C471	471 560Z
Administration	
C201 (101)	N201 312Z
C202 (102)	N202 312Z
C350	Mark C350 515B
Finance	
215	N215 315, 413 407/A/B, 408 215
C314	N314 413 409B, 408 314
C315	N315 413
C417	N417
C418	N418
C430	N430 424
C431	N431 424
C440	N440 423, 426 541B
C441	N441 423, 426
C452	N450 423, 427 530Z
C453	N450 423 530Z
C455	N455 427
C460	N460 429
C461	N461 429
C467	Intl Bus C467
Management	
C211	N211 {Com Law / 211}
C213	N213 {Psyc 011, / 211} Psyc C200
214	N214 } Soc 211
215	N215 }
C266	466
C313	413A/B, 414
C315	415B, 414
C340	N340 430
C341	N341 430
C345	N345 421 470Z
C346	N346 421 470Z
C368	N368 451 503B
C369	N369 451
C401	501A
C405	505B
C407	507A
C409	509B
C460	N460 453 511B
C461	N461 453
C462	N462 432
C463	N463 432
C464	N464 433
C465	N465 433
C466	{N466 452 / Intl Bus C466}
C467	N467 452
C475	N475 211 502Z
C476	N476 211 502Z
C499	560Z
Marketing	
C213	N213 {211, 411, / 421} 419A/B, 320
C350	N350 {211, 411, / 421} 421B, 320
C351	ADMI C350, 515
C352	N352 431
C402	N402 412, 451 551B
C452	N342 412, 451
C453	N453 {221, 222, / 431} 523B

200.3 Faculty of Fine Arts

NOTE A **The use of this note after certain course descriptions indicates that there exists an equivalent course and that students who have credits for this equivalent course may not take the listed course for credits.**

Equivalences prior to 1977-78 are not listed below. For courses with indicated equivalences which are not listed below consult either the Department Office, the Office of Student Affairs, Faculty of Fine Arts or the Registrar's Office.

NOTE C **The use of this note after a course description indicates that the course may be repeated for credit. However, either the number or the letter preceding the number must differ.**

Course	Old Numbers and Equivalents
Art History	
ARTH C244	ARTH C444
ARTH C320	CERA C491
ARTH C322	FBRS C492
Cinema and Photography	
FMST C200	CINE C200
FMST C211	CINE C211
FMST C212	CINE C212
FMST C314	CINE C426
FMST C315	CINE C427
FMST C321	CINE C321
FMST C322	CINE C322
FMST C323	CINE C323
FMST C329	CINE C329
FMST C422	CINE C422
FMST C423	CINE C423
FMST C425	CINE C436
FMST C428	CINE C428
FMST C429	CINE C429
FMAN C312	CINE C212
FMAN C313	CINE C313
FMAN C414	CINE C414
FMAN C445	CINE C436
FMAN C448	CINE C428
FMAN C449	CINE C429
FMPR C231	CINE C311
FMPR C332	CINE C411
FMPR C334	CINE C334
FMPR C335	CINE C335
FMPR C337	CINE C437
FMPR C339	CINE C433
FMPR C341	CINE C333
FMPR C432	CINE C412
FMPR C438	CINE C438
FMPR C445	CINE C436
FMPR C448	CINE C428
FMPR C449	CINE C429
PHOT C200	PHOT C201, C301
Contemporary Dance	
DANC C220	DANC C200
Design	
DESI C340	ART C220
Music	
MUSI C210	MUSI C221, C222
CMUS C310	CMUS C411, C412
CMUS C320	CMUS C321, C322
CMUS C410	CMUS C413, C414
CMUS C420	CMUS C421, C422
INMS C320	INMS C321, C322
INMS C400	INMS C401, C402
INMS C410	INMS C411
MHIS C311	MHIS C301
MHIS C312	MHIS C301
MPER C200	MPER C201
MPER C220	MPER C201
MPER C221	MPER C201
MPER C300	MPER C301
MPER C370	MPER C431, C432
MPER C390	MPER C330
MPER C470	MPER C433, C434
MPER C490	MPER C430
Painting and Drawing	
ART C417	ART C420
PTNG C470	ART C436
DRAW C470	ART C436
Printmaking	
PRIN C210	PRIN C200
PRIN C220	PRIN C200
PRIN C230	PRIN C200
PRIN C310	PRIN C300
PRIN C320	PRIN C300
PRIN C330	PRIN C300
PRIN C450	FBRS C440
PRIN C470	ART C436
Sculpture, Ceramics and Fibres	
SCUL C450	ART C436
CERA C230	CAFT C310, C230

Course	Old Numbers and Equivalents
CERA C330	CAFT C330
CERA C430	CAFT C430
CERA C450	CAFT C450,
CERA C450	ART C436
FBRS C240	CAFT C240
FBRS C260	CAFT C260
FBRS C340	CAFT C340
FBRS C360	CAFT C360
FBRS C440	CAFT C440
FBRS C450	CAFT C450,
FBRS C450	ART C436
FBRS C460	CAFT C460
FBRS C470	ART C440

Theatre

THEA C216	THEA C200, C281
THEA C321	THEA C320
THEA C322	THEA C320
THEA C411	TPER C305
THEA C412	TPER C405
THEA C420	TPER C402
PROD C201	PROD C200, C201
PROD C311	PROD C302
PROD C411	PROD C402
SCEN C221	SCEN C301, C330
SCEN C302	SCEN C310
SCEN C303	SCEN C301, C330
SCEN C307	SCEN C300
SCEN C311	SCEN C300
SCEN C321	SCEN C340 (C220)
SCEN C322	SCEN C340 (C220)
SCEN C411	SCEN C410 (C400, C420)
TPER C215	TPER C203
TPER C216	TPER C204
TPER C413	TPER C406, C402
DINE C412	DINE C410

200.6 Faculty of Engineering

NOTE For OLD SGW 1977/78, OLD LOY and SGW 1976/77, see Undergraduate Calendar 1981/82.

NOTE The use of 'C' in the course prefix is discontinued. Unless otherwise indicated below, a course previously with C prefix is equivalent to the identically numbered one without the C prefix.

Course	Old Numbers and Equivalents
Engineering	
ENGR 342	ENGR C341
ENGR 343	CIVI C354
ENGR 344 } ENGR 345 }	CIVI C353
ENGR 451	CIVI C452
ENGR 452	CIVI C491
ENGR 455	CIVI C455
Engineering & Computer Science	
ENCS 245	ENGR C245
ENCS 281	ENGR C281
Computer Engineering	
COEN 311	COEN C411
Electrical Engineering	
ELEC 498	ELEC C482
Industrial Engineering	
INDU 323	ENGR 412
Quality Control	
QUAL 210	QUAL 362
Computer Science	
COMP 224 & 285	COMP C221
COMP 244 & 291	COMP C241
COMP 292	COMP C251
COMP 325 & 386	COMP C325 & C426
COMP 326	COMP C322
COMP 343 & 385	COMP C443
COMP 353	COMP C453
COMP 392	COMP C341
COMP 423 & 485	COMP C423
COMP 427 & 486	COMP C427

200.7 Credit for Courses with Similar Content

The following courses offered by departments in the Faculties of Arts and Science, Commerce and Administration, and Engineering and Computer Science have elements in common. Students intending to register for courses with statistics content should carefully consult the regulations given below governing credits for these courses.

1. No more than 3 credits will be awarded for courses listed in Group A

Group A
BIOL C222[3], HEAL C211[3]*, ECON C221[3], GEOG C362[3], QUAN C243[3], MATH C207[3], EMAT 271[3]
Students in B.Eng. programmes or the Systems Architecture Option of the B.Comp.Sc. must take EMAT 271[3]

2. No more than 3 credits will be awarded for courses listed in Group B

Group B
BIOL C223[3]*, HEAL C215[3]*, ECON C222[3], GEOG C363[3]**, QUAN C244[3]

3. Students who have received credit for MATH C241[6] will not receive credit for courses in Group A or Group B, nor may they concurrently register for MATH C241[6] and for courses in either Group A or B.

4. A maximum of 6 credits may be obtained from among SOCI C210[6], PSYC C317[6] and the courses listed in Groups A and B.

5. Students in the 'regular' 90-credit degree programme will not receive credits for both MATH C207[3] and PSYC C315[3]. Extended Credit Programme students and Mature Entrants may take for credit both MATH C207[3] and PSYC C315[3], provided they take the courses in that order. Students who have received credit for PSYC C315[3] and C316[3] and who intend to register for MATH C241[6] must first consult with the Psychology Department Undergraduate Programme Adviser.

**This course is no longer offered. Its description will be found in the 1985-86 Undergraduate Calendar.*

***This course is no longer offered. Its description will be found in the 1981-82 Undergraduate Calendar.*

Graduate Programmes

The following graduate programmes are offered at Concordia University. Major options within a programme are also listed. In most cases, courses are given in the late afternoon and evening, or in the evening only, making it possible for both full-time and part-time students to attend. Please contact the graduate programme director at the number indicated for further information.

Department of Applied Linguistics		
M.A.	J. Upshur	848-2446
Department of Art Education		
M.A. & Ph.D.	C. Brooks	848-4644
Diploma in Art Education	L. Sherman	848-4645
Diploma in Art Therapy	J. Byers	848-4641
Department of Art History		
M.A.	L. Lacroix	848-4693
Department of Biology		
M.Sc.	H. Enesco	848-3396
Diploma in Ecotoxicology	P. Anderson	848-3391
Department of Building Engineering		
M.Eng. & Ph.D.	D. Feldman	848-3202
Department of Chemistry		
M.Sc. & Ph.D.	R.T. Rye	848-3344
Diploma in Ecotoxicology	P. Anderson	848-3391
Department of Civil Engineering		
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Faculty of Commerce and Administration		
M.B.A.	L. Winser	848-2716
Executive M.B.A.	N. Mahlab	848-2993
Ph.D. (Administration)	C. Ross	848-2702
Diploma in Accountancy	J.M. Corvington	848-2719
Diploma in Institutional Administration	J.M. Corvington	848-2719
Diploma in Sports Administration	J.M. Corvington	848-2719
	G. Short	848-3856
Department of Communication Studies		
M.A. (Media Studies)	M. Allor	848-2545
Diploma in Communication Studies	D. Murphy	848-2537
Department of Computer Science		
M.Comp.Sc. & Ph.D.	H.F. Li	848-3020
Diploma in Computer Science	H.F. Li	848-3020
Department of Economics		
M.A. & Ph.D.	S. Ahsan	848-3906
Department of Education		
M.A. (Educational Studies)	A. Hamalian	848-2014
M.A. (Educational Technology)	R. Schmid	848-2019
Ph.D. (Educational Technology)	G. Boyd	848-3459
Diploma in Adult Education	R. Smith	848-2029
Diploma in Computer Assisted Learning	J. Vazquez-Abad	848-2041
Diploma in Early Childhood Education	S. Weinberg	848-2024
Diploma in Instructional Technology	R. Schmid	848-2019
Department of Electrical Engineering		
M.Eng. & Ph.D.	R.V. Patel	848-3090

Department of English		
M.A.	M. Butovsky	848-2350
Département d'Études Françaises		
Diploma in Writing/Translation	M. Euvrard	848-7506
Faculty of Fine Arts		
M.F.A.	T. Gibson	848-4608
Diploma in Advanced Music Performance Studies	P. Cohen	848-4710
Department of History		
M.A. & Ph.D.	R. Rudin	848-2422
Faculty of Arts & Science		
Committee-Humanities		
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Library Studies		
Diploma in Library Studies	J. Locke	848-2528
Department of Mathematics		
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Department of Philosophy		
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Department of Physics		
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Department of Political Science		
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M.A. (General Experimental Psychology)	B. Woodside	848-2226
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M.A. (Judaic Studies)	J. Lightstone	848-2068
Ph.D.	C. Davis	848-2067
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Department of Theological Studies		
Diploma in Theological, Religious & Ethical Studies	R. Moroziuk	848-2479

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